

**FACTORS INFLUENCING ADOLESCENTS'
ACCESS TO AND UTILISATION OF SAFE
ABORTION SERVICES IN THE UPPER EAST
REGION OF GHANA**

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FACTORS INFLUENCING ADOLESCENTS' ACCESS TO AND UTILISATION OF SAFE ABORTION SERVICES IN THE UPPER EAST REGION OF GHANA

A thesis submitted in partial fulfilment of the requirement for the degree of
Master of Public Health

by

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ABSTRACT

About 11% of maternal deaths in the Upper East Region of Ghana is as a result of unsafe abortion. Approximately 35% of unsafe abortion mortality occur among adolescents (15-19 years).

This study sought to explore and describe the factors influencing adolescents' access to and utilisation of safe abortion services in the Upper East Region of Ghana; and to identify evidence-informed interventions in order to make recommendations to improve safe abortion interventions.

This study is a literature review of both peer reviewed articles and grey literature. The ecological model, originally developed by Dahlgren and Whitehead, was adapted based on its application by Rominski and Le Tourneau to analysing abortion.

The study found that adolescents had inadequate knowledge of the abortion law and services. Community and gender norms, stigma, limited availability safe abortion services, legal restrictions, poor policy implementation, poor attitude of health workers, poor quality abortion care, and user fees are common barriers. Evidence show that interventions including **dialogues, advocacy, task-shifting, low-cost technology, value clarification training, staff redistribution** and retention, and **removal of user fees** can improve access and utilisation.

The study concludes that a more liberal law, together with increased availability of affordable and non-judgemental safe abortion care and shifts in community and gender norms will improve access and utilisation.

The study recommends **value clarification exercise** for service providers; **use dialogue to shift norms and stigma; addition of safe abortion to insurance package; adoption of medical abortion and** manual vacuum aspiration; **task-shifting and redistribution;** and **abortion legislative reform.**

Key words: Abortion, adolescents, abortion law, Ghana, Upper East Region.

Word count: 13,026

LIST OF ABBREVIATIONS

ASRHP	Adolescent Sexual Reproductive Health Policy
BEMOC	Basic Emergency Obstetric Care
CBAs	Community-based Agents
CEMOC	Comprehensive Emergency Obstetric Care
CHAG	Christian Health Association of Ghana
CHPS	Community Health Planning and Services
CI	Confidence Interval
DALYs	Disability Adjusted Life year
DNM	Doctor, Nurse and Midwife
EMOC	Emergency Maternal Obstetric Care
GDHS	Ghana Demographic and Health Survey
GDP	Gross Domestic Product
GES	Ghana Education Service
GGE	General Government Expenditure
GGHE	General Government Health Expenditure
GHS	Ghana Health Service
GMHS	Ghana Maternal Health Survey
GSS	Ghana Statistical Services
ICPD	International Conference on Population and Development
LMICs	Low and Middle Income Countries
MAF	Millennium Development Framework
MDG	Millennium Development Goal
MoF	Ministry of Finance
MoH	Ministry of Health
MOTECH	Mobile Technology for Community Health
MSIG	Marie Stopes International Ghana
MVA	Manual Vacuum Aspirator/Manual Vacuum Aspiration
NGO	Non-Governmental Organisation
NHIS	National Health Insurance Scheme
OOP	Out of Pocket expenditure
PNDCL	Provisional National Defence Council Law
R3M	Reducing Maternal Morbidity and Mortality
RR	Relative Risk/Risk Ratio
SAC	Safe Abortion Care
SRH	Sexual Reproductive Health
SSA	Sub-Saharan Africa
THE	Total Health Expenditure
UER	Upper East Region
UHC	Universal Health Coverage
US	United States
UNFPA	United Nations Population Fund
VU	Vrije Universiteit
WHO	World Health Organisation

GLOSSARY

Acceptability – refers to the health workforce ability to treat everyone promptly, fairly and with respect, thereby creating trust and demand for Safe abortion services (1).

Access/accessibility: a concept that denotes the idea that any person who needs a health service should have that service (2).

Adolescents: this refer to people aged 10–19 years (3).

Availability – refer the supply and stock of health workers who are fit-for-purpose, in the right quantities and skill mix that meets the health needs of the population (1).

Clandestine Abortions: are secretive abortion procedures that may take place in an unclean environment, performed by quacks or trained personnel and may be illegal. Thus clandestine abortion could either be safe or unsafe; but for this study, clandestine abortion refers to secret, unsafe (and possibly illegal) abortions (4).

Comprehensive Abortion Care (CAC): Is a package of high quality safe abortion services that is delivered to women, taking into consideration their physiological, social and physical environmental factors that influence their ability to access the services (4).

Contraceptive Prevalence Rate (CPR): The CPR refers to the percentage of currently married or cohabitating women between the ages of 15-49 who practice or whose spouses practice any form of contraception (5).

Crude Birth Rate (CBR): It is the number of births per 1,000 populations in a particular year. The denominator includes the entire population (6).

Fertility: is defined as the number of livebirths that women have in their entire reproductive life span (15-49 years (3).

General Abortion Rate (GAR) represents the number of induced abortions that occurs in a given year per 1000 females of reproductive age (15-49). It is computed thus, total number of abortions, multiplied by 1000 and divided by total mid-year population of women aged 15-49 (7).

General Fertility Rate (GFR): The GFR refer to the number of births per 1000 women in their reproductive years (15-49) in a particular year. Unlike CBR, the denominator comprises only women in their reproductive years (6).

Geographical Accessibility – refers to the equitable access to quality safe abortion care services irrespective of physical location of residence (1).

Incomplete abortion: this refer to a botched induced/spontaneous abortion in which some of the content of conception is retained in the uterus (8). Its usage in this study refer to induced incomplete abortions.

Induced abortion: this refers to the termination of unwanted pregnancy by any intervention (surgical, medical or otherwise) other than natural causes.

Live Birth: refers to the complete expulsion/extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life - e.g. beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles - whether or not the umbilical cord has been cut or the placenta is attached (9).

Maternal death is defined as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes” (9).

Maternal Mortality Ratio (MMR): this is defined as number of female deaths that occur during pregnancy or within 42 days postpartum, due to pregnancy-related causes, per 100,000 livebirths in a given period. The numerator is the number of female deaths from pregnancy related causes, and the denominator, the total number of livebirths expressed in 100,000 (5). **NOTE:** all reports from the GHS use the MMR formula to calculate **institutional maternal mortality ratio (iMMR)**, which is a departure from the WHO guidelines. In calculating iMMR the numerator remains as above but, the denominator is **deliveries**. iMMR is thus expressed per 100,000 deliveries (5). Whenever iMMR is used in this study to show MMR (as is often the case, due to scarcity of recent MMR data and due to Ghana reporting norms) a caution is added.

Older Adolescents: this is defined as persons between the ages of 15–19 years (3).

Safe Abortion Care/Safe Abortion Services: this refers to procedures of pregnancy termination, performed by trained health care providers using appropriate tools and techniques and in an environment that meet medical standards. It includes pre-abortion and post-abortion counselling; induced abortion or treatment of abortion complications; and provision of post abortion contraception (1).

Safe abortion: can be defined as the termination of unwanted pregnancy by persons with the necessary skills or in an environment that conforms to minimal medical standards, or both (1).

Spontaneous abortion: this is also called miscarriage; it is the unsolicited termination of pregnancy, usually from natural causes.

Total Abortion Rate (TAR): The TAR is the total number of abortions that women will have in their entire reproductive lifetime, granted that existing general abortion rate remains constant. It is calculated by multiplying the GAR by the length of the reproductive period (usually 35 years) (7).

Total Fertility Rate (TFR): it is defined as number of children that would be born alive to a woman in her entire reproductive years (15-49); assuming she passes through all her child-bearing years in conformity to the age-specific fertility rate (ASFR) of a particular year. It is usually expressed as births per woman (6).

Unsafe abortion: this can be defined as procedures and techniques of terminating unwanted pregnancy by persons who do not possess the necessary skills or in an environment that does not meet basic medical requirements, or both (10).

Utilisation: refer to number of outpatient department visits/inpatient admission per person per year (2).

Young people: they are those in the age range of 10–24 years (3).

Younger Adolescents: this means children aged between 10–14 years (3).

Youth: they are the people between the ages of 15–24 years (3).

INTRODUCTION AND ORGANISATION OF THESIS

David Aladago is my name; I work for the Anglican Diocesan Development and Relief Organisation (ADDRO), an NGO located in the Upper East Region (UER) of Ghana, as a project coordinator. I was involved in the R3M (Reduction of Maternal Mortality and Morbidity) project in Accra. The project exposed me to the daily struggles of adolescents in accessing contraceptives and safe abortion services.

I encountered adolescents being whisked in ambulances to the Upper East Regional hospital due to unsafe abortion. That made me wonder why, despite legally available safe options adolescents continue to suffer from unsafe abortions. I understand that the risk of dying from safe induced abortion is lower than that of a penicillin injection or carrying a pregnancy to full-term (11). Moreover, unsafe abortion is preventable. Yet, of the estimated 56 million induced abortions that occur globally, about 22,500-44,000 women die annually (12). In Ghana, unsafe abortion contribute 11% of maternal deaths (7). Induced Abortion in Ghana is common; over 90% of women have heard of abortion and almost 2 in 10 women have had an abortion (7). Although induced abortion is common knowledge in the UER, social stigma prevents open discussions (13). A situation that Rossier, in nearby Burkina Faso, described as “an open secret” (14). Notwithstanding the stigma that I am likely to face, I decided to take the challenge of investigating the likely factors influencing, adolescents’ access to and utilisation of safe abortion in the UER.

A scholarship granted me by the Netherlands Fellowship Program (NFP) in 2015, enabled me to attend the International Course on Health and Development (ICHHD) training at the Royal Tropical Institute (KIT) in 2015-2016. Having built my capacity in research, this thesis is a fulfilment of my earlier quest for answers. I intend to make recommendations to the Ministry of Health (MoH), Ghana Health Service (GHS), the Marie-stopes International Ghana and other stakeholders to improve safe abortion care interventions for adolescents in the UER.

ORGANISATION OF THESIS

This thesis is organised into 6 chapters. The first chapter presents the background information of the Upper East Region (the study area). The second chapter contains the problem statement, objectives, justification and the research methodology. In chapter three, the findings of the study are presented and analysed in accordance with the framework and study objectives. The fourth chapter contains review of some evidence-informed interventions, presented according to the themes. Discussions on the possible application of the reviewed interventions in the UER are presented in Chapter 5. Finally in Chapter 6, the study conclusions and recommendations for policy makers and service providers are outlined.

CHAPTER ONE: BACKGROUND INFORMATION OF THE UPPER EAST REGION OF GHANA

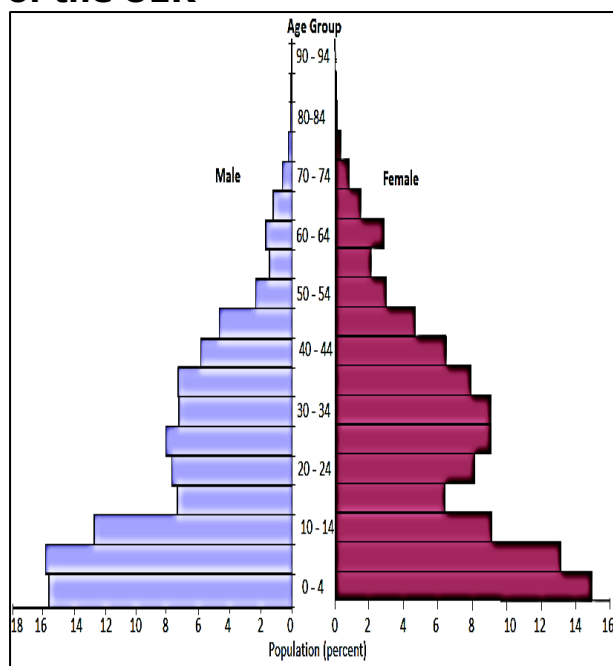
1.1 Introduction

This chapter presents the background of the Upper East Region (UER) of Ghana. It comprises the demographic, the socio-cultural, socio-economic, the healthcare delivery system characteristics and Ghana's abortion law.

1.2 Demographic characteristics of the Upper East Region

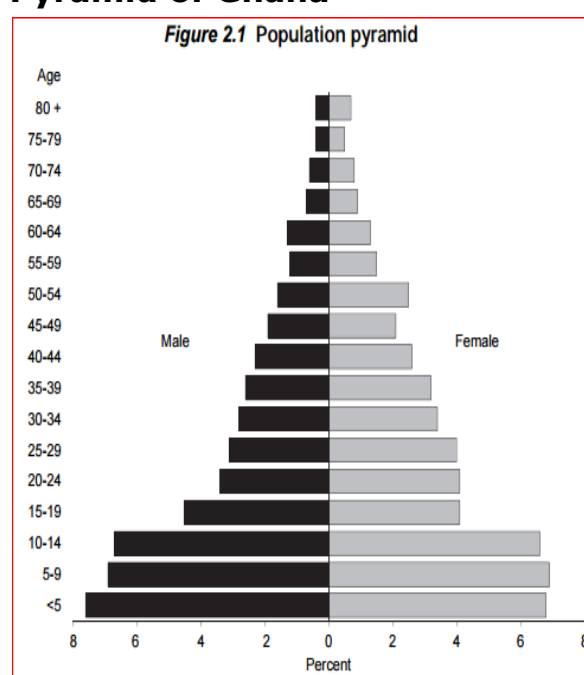
The Upper East Region (UER) is one of 10 administrative regions of Ghana (See Map in Appendix 1). It contains 4.2% of Ghana's estimated 27 million people (15,6). Nearly 80% of the population is rural and 24% are adolescents (10-19 years (6). The Population Pyramids (Figures 1.1 and 1.2) below show the youthful structure of UER and Ghana's population respectively (6,16).

Figure 1.1 Population Pyramid of the UER



Sources: GSS (6,17)

Figure 1.2 The Population Pyramid of Ghana



1.3 Socio-cultural characteristics

The UER is a patriarchal society, with patrilineal system of inheritance. Christians, traditionalist and Muslims form 42%, 28% and 27% of the population respectively (6). Literacy rate is 47% overall and 84% among adolescents in the UER. Nationwide, literacy rate among young women and men is 61.4% and 71.3% respectively (18). Over 95% of adolescents (10-15 years) in Ghana and 64% of the UER's population are in school (6,17).

Although less than 6% of adolescents are in any union, 14% are sexually active (6).

1.4 Socio-Economic Characteristic

The main livelihood of the UER people is agriculture (69%) (6). Half of the UER population under age 25 years are unemployed (6). About 44% of the UER population live on less than \$1.83 per day (19).

1.5 Health system

Health service in Ghana is delivered by both public and private (including informal) providers. The health system has been deconcentrated to regions and districts (20). The Ghana Health Service (GHS) is the public sector health service provider and the Ministry of Health (MoH) is the policy making body (7).

1.5.1 Healthcare delivery system and governance

Healthcare in the UER is organised in 3 levels – primary, secondary and tertiary levels. The Upper East Regional hospital is the referral point for tertiary care (see Appendix 2). The district hospitals are secondary care facilities that should act as gatekeepers for the regional hospital. Due to poor gatekeeping policy, all hospitals provide primary and secondary care. At the community level, the community Health Planning and Services centres/compounds (CHPS) provide primary care and some secondary care services. Informally, community-based agents (CBAs) assist nurses in implementing health promotion and disease prevention activities. traditional birth attendants (TBAs) and Traditional Healers also provide some curative and obstetric services (7,21). The regional health administration/directorate (RHA) supervises the regional hospital and the district health management teams (DHMTs). The DHMTs supervise the district hospitals and the primary care facilities (21,22).

1.5.2 Health facilities

Besides regional hospital, there are 4 district hospitals, 52 primary care facilities and 216 CHPS centres (6,23). About 12% of the healthcare facilities are privately owned, half of which belong to the Christian Health Association on Ghana (CHAG) (24,25).

1.5.3 Health financing

Ghana's national health account show that in 2014, total health expenditure (THE) was 4% of gross domestic product, which falls short of the recommended minimum threshold of 5% necessary to provide basic health services (26,27). Although general government expenditure on Health (GGHE) form 60% of THE, it represents about 7% of general government expenditure, which is less than half of the Abuja declaration of 15%

(26,28). Out of pocket expenditure (OOP) is 27% of THE, which is also above the maximum threshold of 20%, beyond which the risk of catastrophic expenditure and impoverishment increases (26,29). Ghana aims at achieving universal health coverage (UHC) through the National Health Insurance Scheme (NHIS) (30).

1.5.4 Human resource for health

The Doctor, Nurse and Midwife (DNM) to population ratio in the UER is 1:669; equivalent to 1.49 DNM per 1,000 population (31). This falls short of the required minimum of 2.3 DNM per 1,000 population necessary to provide basic health services (32).

1.5.5 Policies on abortion

Ghana is a signatory to the International Conference on Population and Development (ICPD), the Maputo protocol and other international agreements that guarantee adolescent access to contraception and Safe Abortion (33). Ghana has an abortion policy, which permits doctors and midwives to perform safe abortions (34). Ghana, also has an adolescent reproductive health policy (ARHP), which guides the implementations of adolescent sexual and reproductive health (SRH) interventions (25,35).

1.5.6 Health situation

Life expectancy at birth in Ghana is about 62.7 years (60.2 for males and 63.4 for females). In the UER, the total fertility rate is 3.43 livebirths per woman aged 15-49 and crude birth rate is 23 births per 1000 people. Ghana's maternal mortality ratio (MMR) for 2015, was estimated at 216-458 maternal deaths per 100,000 livebirths (36,31). Nationwide adolescent pregnancy rate is 12.1% of girls aged 15-19 years (23). This must be interpreted with caution as the data are based on only pregnancies reported to health facilities. Modern Contraceptive prevalence Rate (CPR) among reproductive age women (15-49) is 22% nationally, against 23.3% in the UER. Less than half of women (15-49 years) have their modern contraceptive needs met (6,31). Among adolescents aged 15-19 years countrywide, the use of any modern contraceptive method is 6.3% overall, 16.7% of those married and 31.5% among sexually active unmarried (17). Nationwide adolescent abortion rate is 17 abortions per 1000 girls aged 15-19 years, which is higher than the General Abortion Rate (GAR) of 15/1000 women aged 15-49 years. Total Abortion Rate (TAR) is 0.4 abortions per woman (15-49 years) (7).

1.6 Ghana abortion law

The Provisional National Defence Council Law 102 (PNDCL 102) regulates induced abortions in Ghana. The law permits abortion on grounds of rape/incest, foetal impairment, to save woman's life or preserve her health (37).

CHAPTER TWO: PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES AND METHODOLOGY

2.1 Introduction

This chapter introduces the study by presenting the problem statement and its justification, objectives and the methodology used in this study.

2.2 Problem statement

An estimated 56 million induced abortions occur worldwide annually. About 27% of them occur among adolescents (15–19 years) (12). The estimated global annual abortion rate is 35 abortions per 1,000 women of childbearing age (15-44 years) (12). Induced abortion rate in Sub-Saharan Africa (SSA) is 31 per 1000 women (12). Globally, about 830 maternal deaths occur daily and induced abortions contribute 8%-18% of them (29,12). Of the estimated 252 million adolescent girls in Low and Middle Income Countries (LMICS), 38 million are sexually active, and 23 million have unmet need for modern contraceptives. Of those with unmet need, 84% use no contraception (12). Nearly all maternal deaths occur in LMICS (29).

Insufficient life skills, inadequate interventions, poverty, curiosity, early marriage and peer pressure are some of the drivers of adolescent unsafe sex (38). Unmet need for FP among adolescents, contraceptive failure and contraceptive discontinuation, together with coerced sexual activities including incest, often result in unwanted pregnancies (38). Most pregnant adolescents resort to abortion due to fear of social stigma, expulsion from school/work, financial constraints, denial of pregnancy by spouse, or as an alternative to contraception (39,38). In most countries, legal obstacles, misinformation from peers, community norms that stigmatise abortion and inadequate access to SAC often influence adolescents to resort to unsafe abortion (38,40). Almost all unsafe abortions occur in developing countries and about 1 in 4 abortions among adolescents in Africa is unsafe (41).

In Ghana, the median age at first sexual intercourse for women and men are 18 and 20 years respectively. By age 15 years, 12% and 9% of adolescent girls and boys (15-19 years) are sexually active. Approximately 51% married adolescents (15-19 years) have unmet need for family planning (49.6% for spacing and 1.1% for limiting) (17). About 39% of pregnancies in Ghana (376,657 in absolute numbers) belong to young people between the ages of 10-24. About 32% of young pregnant women are adolescents aged 10-19 years (23). The Guttmacher estimates that 45% of all induced abortions in Ghana are unsafe (42). There were 13,716 safe induced abortions in 2013 (43). Although often underreported, between 11%-30% of maternal deaths are attributed to unsafe abortion. Approximately 35% of unsafe abortion deaths occur among adolescents (15-19 years) (7,42). The 2007 Ghana Maternal Health Survey (GMHS) indicated that adolescent girls are almost twice likely to use unsafe abortion

services compared to women above 30 years (56.5% against 35% respectively) (7).

In 2014, the maternal mortality ratio (MMR) in the UER was 139 maternal deaths per 100,000 livebirths (23). This should be interpreted with caution as the figure represent only institutional cases. The UER also has the highest adolescent pregnancy rate (15.5% of girls aged 10-15 years); compared to 12% nationwide (23). Between the years 2011 and 2014 there were 2,241 to 2,751 registered induced abortions among adolescent girls in the UER (23,25,44).

Besides the risk of chronic morbidity and mortality, adolescents who utilise unsafe abortion and their families risk productivity/financial loses, stigma and legal penalties (40). According to Singh et al. (2003, cited by Grimes et al. (45)), about 5 million Disability Adjusted Life Years (DALYs) are lost per year by women of reproductive age due to unsafe abortion mortality and morbidity. Additionally, the healthcare system faces medical, legal or overhead costs resulting from the treating unsafe abortions, which could also affect the national budget. It is estimated that governments of developing countries spend US\$500 million annually, treating unsafe abortion complications; with an addition OOP of US\$600 million (46,47). With nearly half of the UER population living in poverty, there is a higher risk of catastrophic expenditure, which could lead to further impoverishment (19,48). In Ghana, OOP of about US\$8.5 million is due to unsafe abortion (49).

2.3 Justification

Literature show that unsafe abortion and its associated disease burden is preventable (8,29). Between the 1990s and 2015, global MMR declined by 44%, which is equivalent to 2.3% annually. To achieve SDG 3.1 target of 70 maternal deaths per 100,000 livebirths by 2030, a global annual reduction rate of 7.3% is necessary (29). Reducing unsafe abortions among adolescents is very important in meeting this target since they constitute nearly a third of global induced abortion fatalities (12).

Ghana has made several efforts to reduce abortion related maternal mortality. For example, the 1960 criminal code was reviewed in 1985, decriminalizing abortion in specific circumstances (50). In 2000, The Adolescent Sexual Reproductive Health Policy (ASRHP) was also made to guide service provision (51). In 2010, the Millennium Development Goal (MDG) 5 Acceleration Framework (MAF), which also focused on providing EMOC, was implemented (31).

All these and several other interventions notwithstanding, maternal mortality ratio in the UER increased from 108 to 139 maternal deaths per 100,000 livebirths between 2010 and 2014 (31). This should be interpreted with caution as this represent institutional cases only. Adolescent

pregnancy rate also remained unchanged at 15% of adolescent females (15-19 years) (23). Unsafe abortions appear to be rising, while utilisation of SAC declined, with older adolescents most affected (23). Induced abortion remains the largest contributor to maternal mortality among adolescents in Ghana (27% and 72% among 15-19 and 12-15 years respectively) (7).

Preliminary literature review suggest that stigma and access to SAC may be driving unsafe abortions in Ghana (52). However, differences exist between the UER and the rest of the country, in terms of socio-economic conditions and community norms (31,24). Le Tourneau suggests that contextual differences may influence adolescents' access and utilisation SAC differently (40). This study explores these different factors in the context of the UER, in order to make recommendation to the GHS, MOH, Marie Stopes International Ghana (MSIG) and other stakeholders in adolescent sexual and reproductive health. This study is particularly relevant at this time because the findings will help implementers of the 2030 agenda, to make informed decisions on SAC interventions among adolescents in the UER.

2.4 Main study objectives

To Explore and describe the factors influencing adolescents' access to and utilisation of safe abortion services in the UER of Ghana; in order to make recommendations to the MoH, GHS and MSIG and other stakeholders, to improve safe abortion care interventions.

2.4.1 Specific objectives

- ❖ To examine adolescent characteristics that influence their access to and utilisation of SAC.
- ❖ To describe healthcare system delivery factors that influence adolescent access to and utilisation of SAC.
- ❖ To explore the influence of community norms and social networks on adolescent access and utilisation of SAC.
- ❖ To examine the influence of Ghana's abortion law on adolescents' access to and utilisation of SAC.
- ❖ To identify and recommend evidence-informed interventions that may improve adolescent's access to and utilisation of safe abortion services, to the GHS, MoH and Marie-stopes International Ghana.

2.5 Methodology

2.5.1 Search strategy and data

This study's methodology is literature review. Published scientific documents were identified through the VU e-Library, Cochrane library and PubMed. The searches were limited to English publication date since 2006. Only documents with access to full text versions were included. Literature

without data on induced abortion or contained exclusively spontaneous abortions were excluded. The articles were manually browsed and selected. References of suitable documents were also used to locate additional literature. Grey literature, including reports and policy documents were also retrieved from the WHO, Guttmacher Institute, Ipas, MoH, GHS, HIMS and Ghana Statistical Service (GSS) websites. Table 2.1 contains the search terms that were used in this study. The boolean operator OR was used to combine the search terms "teenager" and "adolescent". All other search terms were connected by the boolean operator AND.

Table 2.1 Search Table

#	Source	Key words used for the search according to objective				
		Objective 1	Objective 2	Objective 3	Objective 4	
1	Scientific articles through PubMed, Google scholar, Cochrane library and VU e-library	Adolescent, teenager, education, Knowledge, socio-economic, abortion, induced, Ghana	Stigma, gender, equity, sexuality, culture	Religion, norms, access society,	Healthcare, attitude, utilisation, financing	Law, policy
2	Official national health websites	Abortion, teenager induced, unsafe, elective, adolescent	stigma, values, gender, equity	culture, norms, networks,	insurance, contraception, maternal, mortality, Healthcare, financing, morbidity, guidelines, utilisation, access, Emergency, obstetric	Ghana, abortion law, Criminal, code 1960, PNDC 102, abortion protocols, standards, policy guideline, adolescent, reproductive health
3	Grey literature	Adolescent, teenager, induced, pregnancy, abortion	induced, evidence, account acceptability, out-of-pocket, expenditure, Finance	National, health account, maternal, disease burden, contraception, utilisation, human, resource access, Ghana, quality	Law, restrictive, policy, liberal, access,	

2.6 Theoretical framework for study

The following theoretical models were reviewed, in search of a suitable framework for this study.

The Andersen model

This model proposes that 4 main groups of factors influence health service utilisation – environmental, predisposing, enabling and need factors. Environmental factors refer to the general socio-economic and political environment in which the person lives. Predisposing factors refer to individual characteristics such as age, that may act as determinant of health service utilisation. Enabling factors on the other hand refer to the family/community support system. Finally, the individual's own assessment of the need for the service (evaluated or perceived) is equally important in deciding to use a service (53). The model attempts to show that multiple factors influence behaviour, but appears to be skewed towards the individual and the family as the main determinants of service utilisation with little attention on the role of social interactions and laws, which may be more important (54).

The Benson Conceptual Framework for evaluating safe abortion programs

The Bensons Framework is used to assess the outcomes of abortion interventions. It presumes that favourable socio-economic, political and legal context would encourage demand and supply of SAC. Secondly, women need to know their options, feel empowered and have the right attitude towards seeking SAC. Finally, service providers must be capable, willing and equipped with the necessary supplies to provide SAC. The interactions between these 3 broad factors will ensure that women use SAC (55). The weakness of this model is that, it does not emphasise the influence of community norms or social networks, family/partner on adolescents' decisions.

The Socio-Ecological Model (SEM)

In 1991, Dahlgren and Whitehead (56) proposed that besides an individual's permanent characteristics such as age, sex and genes, the physical and social context in which that individual lives also determines the health behaviour. Using similar logic, Le Tourneau the SEM of abortion stigma, showing 6 levels/categories of factors (see Appendix 3) (40). Rominski (54) also used the model to investigate abortion in Ghana. Rominski, argued that unlike the other models, SEM's usefulness in analysing the influence of norms and social networks on women's actions, makes it most suitable for studying abortion phenomenon in Ghana (54). The SEM's flexibility of being able to analyse both supply and demand side factors combined with social networks, influenced its use for this study (as

modified in figure 2.1). The levels, as adapted in this study is further described below in ascending order of influence.

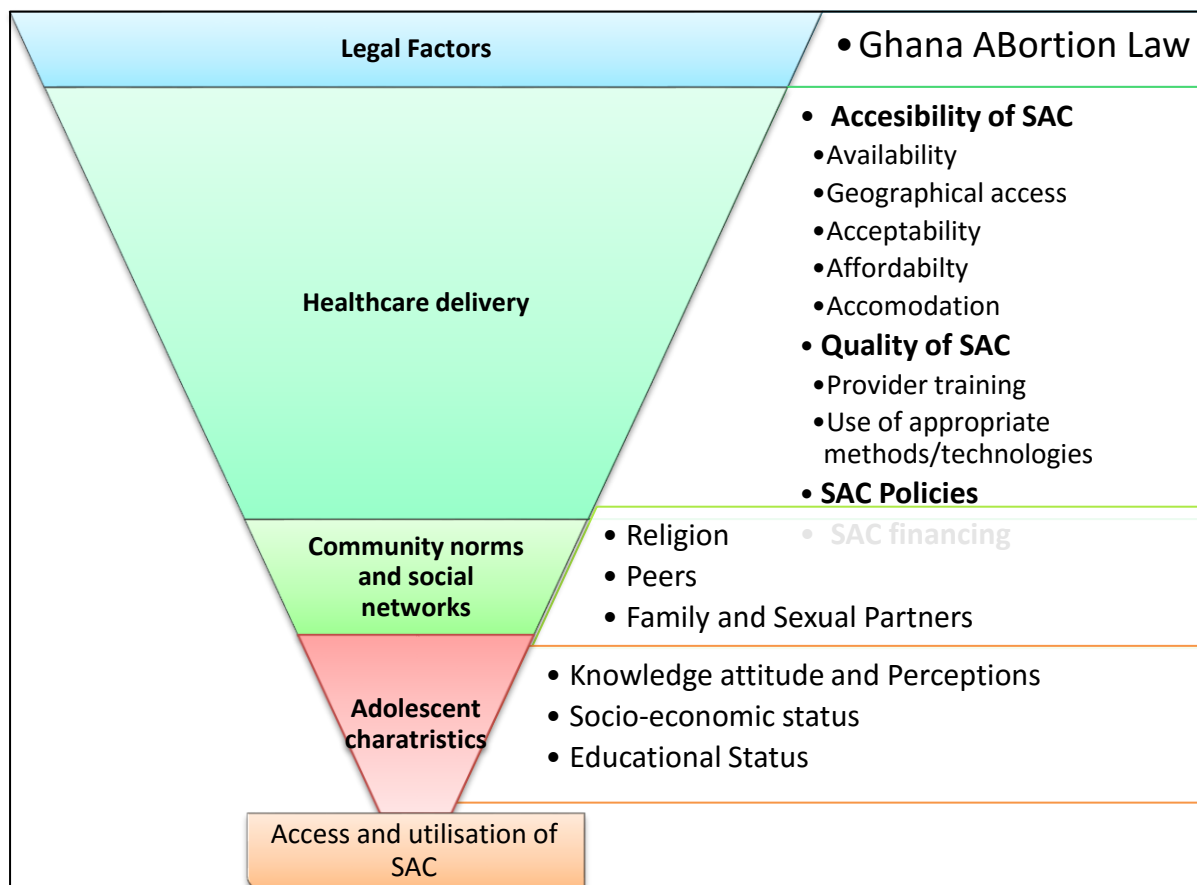
At the **Individual level**, Le Tourneau, examined the influence of stigma on individuals who assist or receive abortion (40). Rominski suggested that individual level factors (such as knowledge) is a Western concept, with the tendency of masking underlying social determinants. Consequently, it creates the [false] impression that abortion decisions are rational and informed (54). I will argue that the individual level characteristics are equally important because can be used to improve interventions. For example, English is the official language of Ghana (16), but only 54% of rural women are English literate (17). I therefore focus on education, knowledge and socio-economic status as they are known to be associated with maternal mortality in Ghana (7).

Le Tourneau (40) described **Community level factors** to include community norms, attitudes and behaviours towards abortion. Rominski emphasises on social networks (peers/family/religion) (54). This study merges both perspectives into **community norms and social network factors**. The factors investigated include gender norms, religion, peers, and Family/sexual partners which have been implicated in both studies.

The Institutional level factors in this study refer mainly to the healthcare delivery system factors; defined as the attributes, policies and practices of SAC suppliers that could influence adolescent access and utilisation of SAC. The factors in this include accessibility, quality SAC services, policies and healthcare delivery financing (see figure 2.1).

Finally the **Legal level** concerns deliberately written laws that inhibit adolescent access to SAC. This level is broadest because it regulate all the other influencing factors. This study would investigate how Ghana abortion law relates to adolescents access to SAC. This study excluded **mass media** and culture level because less than 4% of the study population are exposed to the media (7). The adapted framework is used to describe the factors influencing adolescent access to and utilisation of SAC, which is presented in chapter 3.

Figure 2.1 Socio-Ecological Model of Factors Influencing Adolescent Access To and Utilisation of Abortion



Source: Adapted from Rominski and Le Tourneau (40,54).

Overall, the premise of this model is that adolescents will access and utilise SAC if they are well informed and SAC is legal; accessible; the community stigmatising norms are changed and social networks support the behaviour. The utilisation of SAC could lead to a reduction in maternal mortality and morbidity, and contribute to Ghana’s achievement of SDG 3.1 (39).

2.7 Limitations of the study

First, this study may be exposed to publication bias because only English literature used and almost all literature were accessed from online sources. In addition, abortion is considered a sensitive and private issue in Ghana (57), thus, data contained in most literature is likely underreported. Literature on abortion among adolescents in Ghana are limited, particularly the UER; hence most information could not be properly triangulated. Data from diverse studies (both within and outside Ghana) with similar context were used for triangulation. The methodology of each study (majority of them from reputable peer-reviewed scientific journals) was thoroughly reviewed to ensure validity and quality.

CHAPTER THREE: FACTORS INFLUENCING ADOLESCENTS' ACCESS TO AND UTILISATION OF SAFE ABORTION SERVICES

3.1 Introduction

This chapter explores the context in which adolescents get unintended pregnancies; why they need abortion and the factors influencing their access to SAC. The findings are presented in accordance with the objectives and the framework – adolescent characteristics, community norms and social network, healthcare delivery, and legal factors.

3.2 The context in which adolescents get unintended pregnancies

Although some adolescent pregnancies are intended, in SSA, an estimated 35% of adolescent (15-19 years) pregnancies are unintended (58). Unmet need for modern contraceptives account for majority of unintended adolescent pregnancies in LMICs (59). Early marriage, non-use and inconsistent/improper use of contraceptives, transactional sex and coerced sex are also well established risk factors for pregnancy in adolescence. Other common reasons for unprotected sex include psychological pressure from family/partners or peers, pleasure, perceived subfertility and difficulty in accessing contraceptives/sex education (38,60). It is estimated that fecund cohabiting non-contraceptive users have up to 85% risk of pregnancy in a year (61). Moore et al., also found that among adolescent girls (12-19 years), 15%, 30% and 38% in Burkina Faso, Ghana and Malawi respectively, were coerced into their first sexual experience (62). Disabled adolescents may experience much higher rate of sexual coercion. The United Nations Population Fund (UNFPA) reports that 20% of all disabled women in Burkina Faso have had coerced sex (63). Most women in developing countries entertain fears of negative side effects of hormonal contraceptives; therefore some women avoid contraceptives altogether (64). Although most contraceptives have side effects, majority of adolescent fears are due to misinformation from their social networks (54,64).

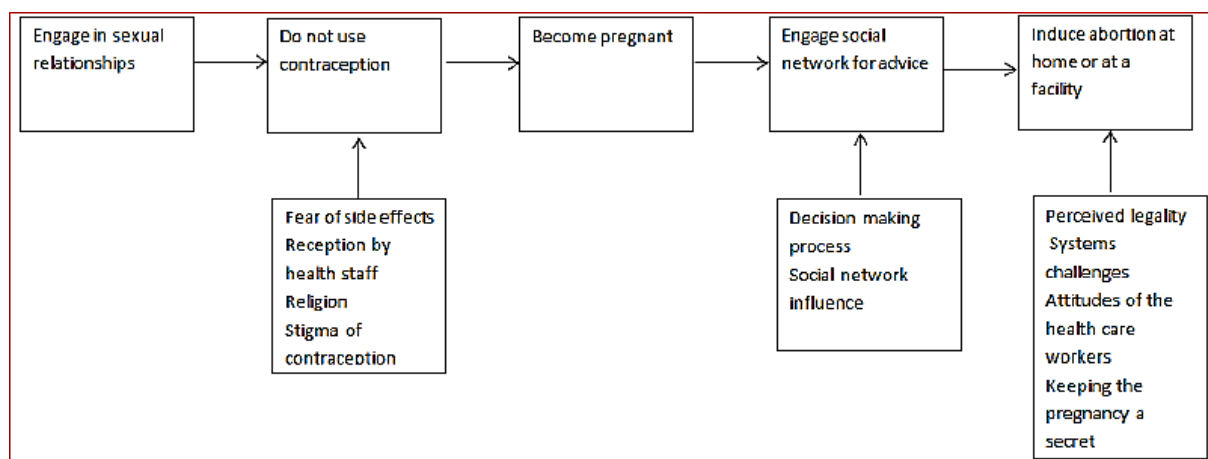
The Ghana demographic and health survey (GDHS) revealed that 9.3% and 11.8% of adolescents boys and girls (15-19 years) respectively become sexually active before age 15, and 40% by age 18 (17). Yet contraceptive prevalence rate (CPR) is Although 96.5% of married adolescent girls (15-19) in Ghana know of contraceptives, 16.7% of them, 31.5% of sexually active unmarried and 6.3% of all adolescent girls use any modern contraceptive (17).

In the UER, about 5% of adolescents aged 12-14 years are married. The proportion of married adolescent girls (15-19 years) are more than twice their male counterparts (13.3% against 4.8% respectively) (6). This presupposes that most adolescent girls the UER are married to older men.

A qualitative study in a rural district in the UER reported that majority of respondents were not accessing family planning services due to opposition from husbands (65). Married adolescents are by norm expected to get pregnant as evidence of her fertility and the man’s virility. Although 51% of married adolescent girls (15-19 years) have unmet need for family planning (49.6% for spacing and 1.1% for limiting), all married men in Ghana want to have at least 1 child (17). As a result most pregnancies of married adolescents will be wanted, and not lead to unsafe abortions. However, birth spacing may be lacking because of gender inequalities and unfair power relations in favour of men, unmet need for family planning, low knowledge of contraceptive use and fear of intimate partner violence (38,59). This may partly explain why, unlike the rest of the world, married women in SSA has lower abortion rates than unmarried adolescents (12).

Intergenerational sexual relationships between older men and unmarried adolescent girls known in Ghana, known as “sugar daddy”, may contribute to unintended pregnancies as inexperienced girls may be unable to negotiate safe sex (66). Krugu et al. noted that in the UER, skewed adolescent reproductive health education towards abstinence, could be contributing to the low contraceptive usage, which often lead to unintended pregnancies (67). Krugu et al., also found that although most adolescent girls in the UER have strong self-efficacy regarding negotiating condom use, they have an apparent ambivalence towards its acquisition due to stigma. Adolescent girls expect their male partners to acquire condoms, which could inadvertently, put males in control of contraceptive use (67). Some Ghanaian women fear side effects (including spotting) of contraceptives such as IUD and therefore resort to abortion as a birth control, leading to more side effects (68,69). In figure 3.1, Rominski show that adolescents get pregnant due to unprotected sex, which is driven by fear of side effects/stigma of contraceptive acquisition and use among others (54).

Figure 3.1 The process of unwanted Adolescent pregnancy in Ghana



Source: Adopted from Rominski (54)

3.3 Why adolescents seek abortion

In most developing countries, stigma against adolescent premarital sex and unmet need for contraception often drive adolescents to seek abortion for unintended pregnancies (38). An estimated 2.9 million induced abortions among adolescents (15-19 years) are due to unintended pregnancies (59). In some African countries about 40% of births among adolescents (below 20 years) are unplanned (70). Other common reasons why adolescents seek abortion include socioeconomic challenges (including poverty, lack of partner support, interference with education or employment); family size preferences (postponement or spacing of childbearing); violence related (intimate partner violence, gender based violence, rape); risks to maternal or foetal health; pregnancy resulting from incest and contraceptive failure (38,39).

Ghanaian adolescents are expected to be in school or career training; schooling is compulsory for adolescents up to 14 years (13). Ghana Education Service (GES) unwritten policy allows schools to expel students on grounds of pregnancy (54). That probably partly explains why more female adolescent students in the UER consider pregnancy their major concern (13).

3.4 Factors Influencing Adolescent Access to safe abortion

The fact that adolescents in developing countries face structural, cultural and legal barriers to obtaining SAC and reproductive health services in general, has been well-documented (38,47). Some of these barriers relate to characteristic of the individual – lack of knowledge on safe abortion, poverty and illiteracy (38). Most of the factors – laws, norms, availability and adequacy of healthcare – are beyond the individual control (71,72).

3.4.1 Adolescent Characteristics

The factors presented here are knowledge attitude and perceptions, socio-economic status and educational status.

i. Knowledge, attitudes and Perception of SAC Services

Studies confirm that knowledge influences adolescent access to and utilisation of SAC (38). In most LMICs, adolescents have no medically accurate and complete information on sex, pregnancy and contraception. The lack of knowledge often result in myths and misperceptions of contraception and abortion. Additionally, many of them have no knowledge of the location of SAC providers, thus resort to unsafe abortions (8,38).

The 2007 GMHS revealed that less than 2% of women in the UER understand that abortion is legal, and none of them know any of the legally permissible conditions (7). Recent studies found that 86% of women in the UER are ignorant of the legal status of abortion (73). Sundaram et al. (74) found that women who knew the legal status of abortion were 1.3 times more likely to use SAC than those who did not know. Konney et al. also

found that 92% of post-abortion care clients did not know the legal status of abortion (75). Payne et al. also found that majority of women who had unsafe abortion either did not know legal abortion is available or did not know where to obtain it (76). These apparent consistent findings suggest that adolescent knowledge of the abortion law might be a determinant of SAC. The GMHS also revealed that less than 4% of the UER women are exposed to the mass media, which implies media-based campaigns may not reach majority of them. In addition, about 88.3% of adolescents (15-19 years) in Ghana and 5.2% of reproductive age women (15-49) say that they do not have access to SAC (7).

ii. Socio-economic Status of Adolescents

Studies have shown a positive relationship between socio-economic status of adolescents and utilisation of SAC in developing countries (8).

In Ghana, the proportion of adolescents (15-19 years) who have begun childbearing is highest in the second wealth quintile (21%) and lowest in the wealthiest quintile (6%); which could be a sign of higher unmet need for contraception and SAC among the poor (17). Women in the top wealthy quintile are twice likely to utilise SAC compared the poorest quintile (71% against 37.8% respectively) (7). Additionally, unmarried male partners often deny responsibility for pregnancy or leave the union whilst the girls face much of the severe consequences for a lifetime. Those unable to afford SAC may resort to unsafe abortions (77).

iii. Educational status

Studies have shown a positive relationship between level of education and reproductive health service utilisation, even in adverse family or socio-economic situations (8).

Although Konney et al. did not find statistically significant association between education and SAC utilisation (75), Sundaram et al. found that educated women are 1.4 times more likely to utilise SAC than non-literate Ghanaian women (78). The GDHS show that the risk of childbearing among non-educated adolescents (13-19 years) is almost 4 times higher compared to uneducated adolescents, which might partly be due to differences in access to information, contraception and SAC (17).

3.4.2 Healthcare System Delivery factors

In many developing countries where abortion is legal, there are no sufficient health facilities, supplies, and/or trained health workers (59). Adolescents with limited accessibility to SAC are known to resort to unsafe abortion (72,42).

i. Access to safe abortion services

Penchansky and Thomas' (1981) 5 "As" of access – availability, geographical accessibility, acceptability, accommodation and affordability – as cited in Levesque et al. (79), are used in this study. Affordability is discussed under abortion financing and partly in socio-economic status of the individual.

ii. Availability of human resource for SAC

About 90% of global maternal deaths are attributed healthcare personnel shortage, with rural areas carrying the largest burden (1). The WHO recommends a DNM to population ratio of 2.3:1,000 population, to ensure availability of basic healthcare (32).

Although the MOH states that 30% of Community Health Planning Services (CHPS) Centres have trained midwives, it also estimates (as in table 3.2 below) that the UER has an excess of 110 midwives (indicated as -110) (31). The Ghana Living Standard Survey 6 (GLSS 6) found that 95% and 98.8% of rural communities in Ghana and the UER respectively, indicate they have no health personnel. Of the 1% in the UER that have health personnel, about 24% have either a Doctor, nurse or midwife (80). This could mean that, for most adolescents in the UER, SAC is neither availability nor accessible (24).

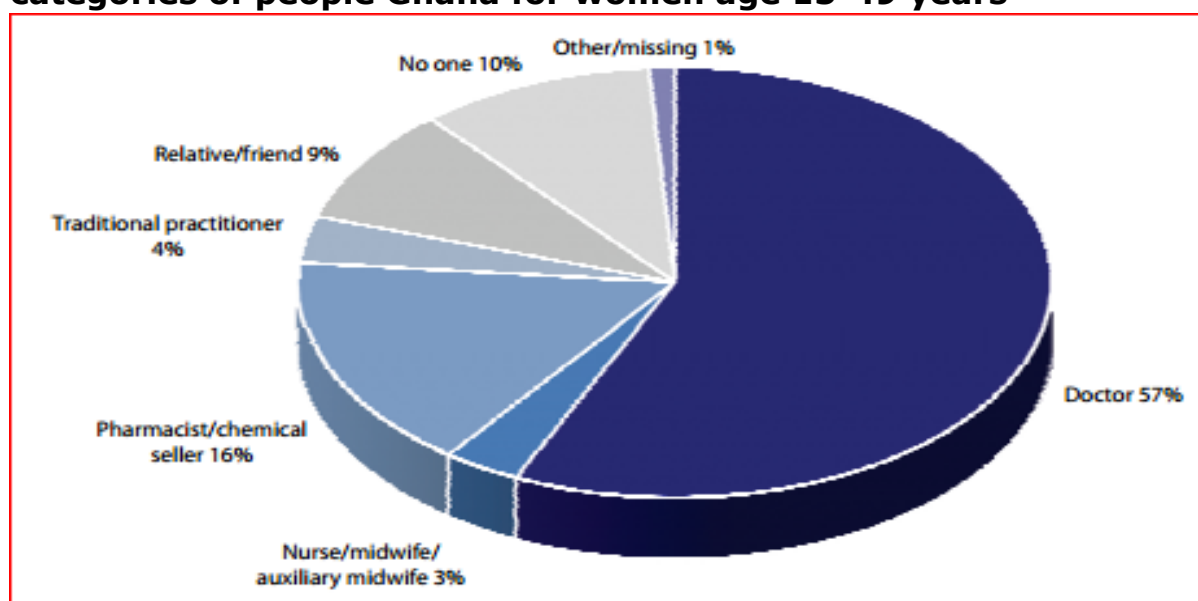
Table 3.1 Estimated midwife gap in Ghana by region

	AR	BAR	CR	ER	GAR	NR	UER	UWR	VR	WR	Ghana
2011	-81	-45	3	-120	-266	52	-53	-49	-60	53	-565
2012	-45	-21	31	-85	-244	90	-45	-32	-8	52	-307
2013	-145	-43	33	-95	-277	97	-83	-18	-29	22	-538
2014	-337	-79	13	-164	-263	68	-110	-48	-69	-34	-1,023

Source: MoH (31)

Although the 2006 abortion policy permits midwives to perform abortions (34), the GMHS show that doctors and drug sellers perform majority of abortions in Ghana (57% and 16% respectively) as shown in figure 3.2 below (7). This show that despite apparent midwife availability, most of them may not be performing SAC.

Figure 3.2 Proportion of abortions performed by different categories of people Ghana for women age 15-49 years



Source: GMHS (7)

iii. Geographical Accessibility to SAC facilities

Long distance or difficult physical access to health facility are known barriers of adolescent access to and utilisation of SAC (38,8).

A survey by Aboagye et al. found that facilities that provide SAC are scarce; less than 1 in 7 public health facilities offer legal SAC in Ghana (54). Nationwide, about 25%, 10% and 3% of rural communities have a clinic/CHPS, maternity home and hospital respectively (80). More than half of rural residents in Ghana cite lack of health facilities as their major problem (80). Nationally, 43.1% of rural women use SAC compared to 63.3% of urban women (7,74). Adolescent abortion rate in urban areas is about twice the rate in rural areas (22 against 13 abortions per 1000 girls aged 15-19 years respectively) (7). Since majority of the UER is rural, it is likely that most adolescents in the UER have limited access to SAC (81,21). The GHS 2014 annual report indicated that all reported abortion cases were offered SAC (23). This imply SAC is available but perhaps only to those who know and can access health facilities (54).

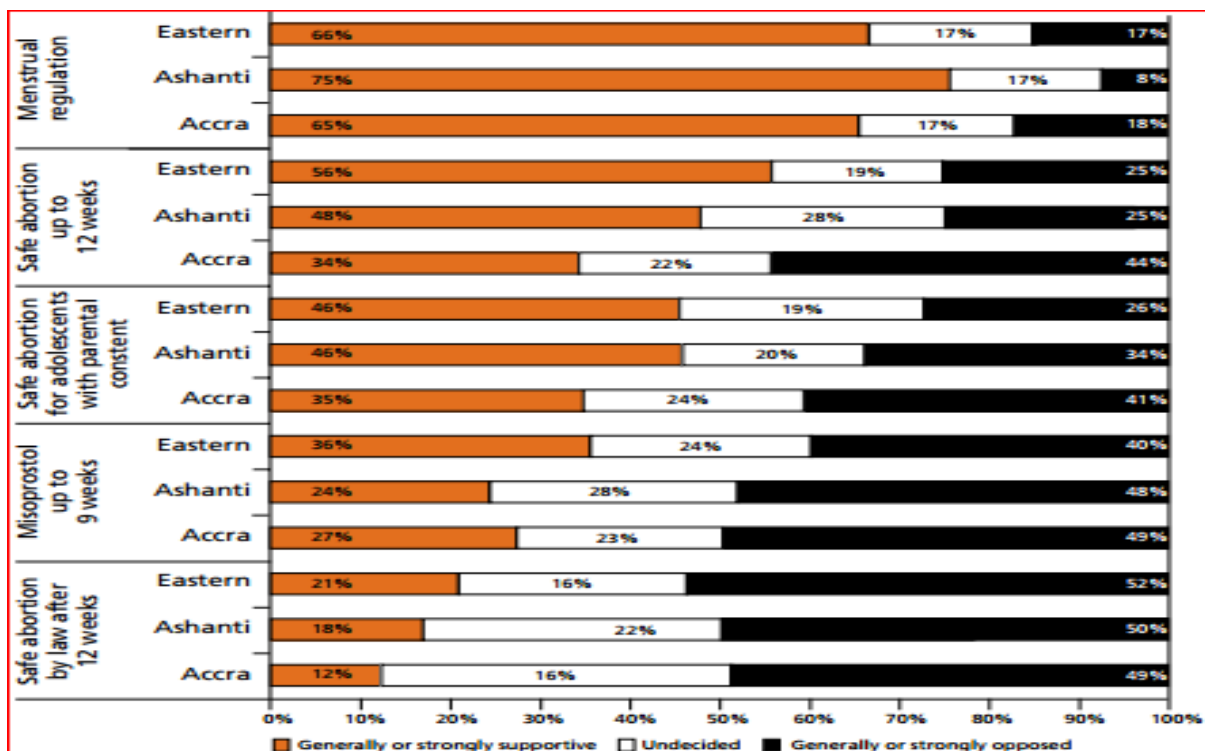
Additionally, Basic and Comprehensive Emergency Obstetric Care facilities provide signal functions that are relevant to safe abortion care, (See the 7 and 9 signal functions that form criteria for categorising these facilities in appendix 4) (82,83). The MOH reports that Ghana has not met the WHO minimum threshold of 5 facilities (1 of which must provide Comprehensive Emergency Obstetric Care) per 500,000 population (82,84).

iv. Acceptability and Accommodation

The fact that healthcare provider attitudes affect adolescent access to SAC have been well documented (38,8). Adolescents in countries where SAC is legal, often face biased and judgemental attitudes of service providers, especially in SSA (71,70). Health workers' ability to respect, assure privacy and confidentiality is vital in influencing SAC utilisation (71).

Aboagye et al. revealed that health staff would hesitate in providing SAC on grounds of religious conflict (50.2%), and uncertainty of legal status of abortion (47.8%), protocol doubts (37.9%) and perceived lack of administrative support (33.3%) (49). This unwilling attitude could hamper adolescent access to SAC in the UER (54,76). In Figure 3.1 Aboagye et al. (49) show that about 65% of health workers in Greater Accra region and 75% in the Eastern region would support the provision of "menstrual regulation" to adolescents; but less than 18% strongly oppose it. The level of support dropped to between 12% in Greater Accra and 21% in Eastern Regions, when asked about providing safe legal "abortion" to adolescents. Correspondingly, the opposition of safe legal abortion also increased to 49% and 52% in the same respective regions. This may be indicative of stigma associated with the word "abortion" among healthcare providers. This adds to the suggestion that value clarification exercise is essential to ensure healthcare delivery system responsiveness to adolescent SAC needs (85).

Figure 3.3 Health worker attitudes towards implementation of specific abortion services



Source: Aboagye et al. (49)

Literature also show poor record-keeping and data management is widespread problem in Ghanaian health facilities (49,25). Aboagye et al., found that the estimated time for legal abortion range from 30 minutes to 6 hours and no waiting list (49). Such delays may increase adolescent anxiety and opportunity cost for loss of paid work time (8). On the other hand, it is noteworthy that some service providers often provide SAC due to professional ethics and the desire to mitigate the health consequences of unsafe abortion (34). That offers opportunity to encourage them and others to provide SAC. In addition, almost all midwives in Ghana are females, which is also acceptable to most adolescent's (31).

v. Quality of services

Quality of health services is essential in improving utilisation of SAC among adolescents (8,86). This study groups them into two - provider training and support; and the use of appropriate methods and technologies (47).

Provider training and support

The 2006 abortion policy guidelines and protocols, paved way for training of nurses and midwives (midlevel health workers) to provide SAC (34). However, it led to increase in numbers but not improvement in quality of SAC for adolescents (7). Studies show that unlike doctors, most nurses and midwives have inadequate knowledge of the abortion law and policy (34). Voetagbe et al. revealed that less than a third of midwifery tutors received training on Ghana's abortion law or uterine evacuation (85). The findings of Voetagbe et al., imply that although midwives are relatively accessible in the UER, they may lack the skill for provide SAC (31,85). In addition, it has been theorised that, stigma can becomes institutionalised when providers don't disclose abortion procedures; creating a false impression of uncommonness. Ultimately that perception reinforces abortion stigma and leads to a vicious circle of stigma, which Harris et al. described as "legitimacy paradox" (87). Payne et al. (76), reported that some nurses in Ghana refuse to setup surgical carts and instruments for abortion due to stigma. It is worth noting that some SAC providers are also labelled with stigmatising and derogatory names such as abortionists and murderers (88).

Use of Appropriate Technology

The WHO guidelines for SAC show a clear shift from D&C to medical abortion (MA) and manual vacuum aspiration (MVA)/electric vacuum aspiration (EVA) in resource-constrained healthcare systems (47). In Ghana, Aboagye et al., found in that about 72.7% of providers use D&C to treat incomplete abortions, which is more risky, expensive and painful than MA or MVA (47,49). Misoprostol is used in 35% of facilities while mifepristone-and-misoprostol combination, is used in 8.3% of facilities to induce abortion (49). This may again be linked to the quality of training,

the resources available and the healthcare system capacity to implement evidence-informed changes (85).

vi. Abortion Policies

Government's obligation to make policies that ensure adolescent access to timely and quality SAC are enshrined in several international resolutions including the ICPD and the Maputo protocol, which Ghana is a signatory (89,11). Ghana's adolescent reproductive health policy (ARHP) and the 2006 standards and protocols for safe abortion services (developed in 2000 and 2006 respectively) are two important policies that guide adolescent sexual and reproductive health services (25,34). The abortion policy clarifies the apparent third-party consent ambiguity in the law; by instructing that adolescents below 18 years be encouraged to seek parental assent but not denied SAC on grounds of assent (34).

Aboagye et al. found that providers do not have adequate knowledge of the policy and may not be implementing it fully (49). Moreover, reproductive health education is integrated in to formal education curriculum, but access to SAC or contraception are hardly encouraged or implemented. Most adolescent students in the UER believe that they have to abstain from sex to prevent unwanted pregnancies; or that they can improve their sexual lives by avoiding contraceptives (13). This lack of accurate information from policy implementers could hinder adolescent access to SAC as well (49).

vii. Financing Abortion and Affordability

High cost of health services or introduction of user fees are often associated with high OOP, low access and low utilisation of services by the poor (86). According to the WHO, excluding SAC from insurance cover, or failing to eliminate/reduce user fees for poor women and adolescents create a financial barrier leading to inequities in access and utilisation (47).

Although Ghana aims at achieving universal health coverage (UHC), using NHIS, SAC is paid OOP (30,48). Most NGOs such as MSIG that provide SAC, rely mainly on donor funds, which are unreliable (90). The direct cost of SAC in 2007 was between US\$4.17-US\$18.75 (91), which is about 2 to 9 times higher than the daily minimum wage equivalent to US\$2.00 (92) (using average 2007 exchange rate US\$1=GHC0.930) (93). When indirect cost such as transportation, under-the-table payments and other opportunity costs are added, accessing SAC may become impossible for poor women and adolescents (8). Some Ghanaian women self-induce abortion before reporting to health facilities to access post abortion care, which is more expensive, but covered by the NHIS (54). The per capita OPD attendants among insured clients in 2013 was more than twice the uninsured, which may indicate inequity in access. Moral hazard, adverse selection and risk selection alone may be insufficient to explain such a wide disparity (31). The NHIS plans to roll out capitation as the new payment

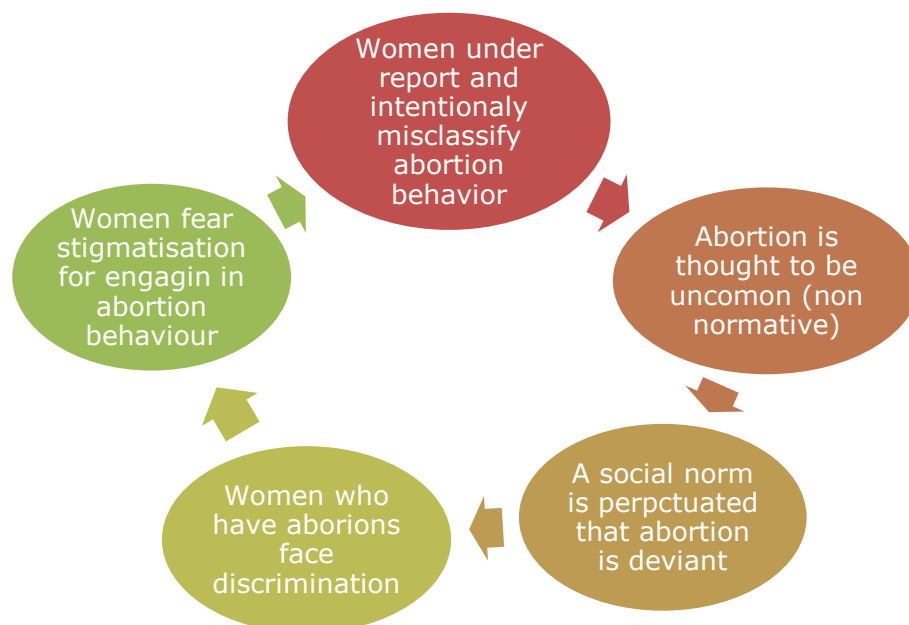
mechanism, which offer the opportunity to add SAC to the service package (30).

3.4.3 Community Norms and Social Network Factors

i. Community Norms

Stigma, a concept that denotes the discrediting labelling of people for deviating from community norms, is a known barrier to adolescent access to SAC (52,40). Although, norms, gender and power relations between men and women may be socially constructed and contextual, abortion stigma is widespread. Women in developed countries like USA, experience stigma just as women in Nigeria, Ghana or Kenya (40). In countries where abortion is legal and widely available, social stigma and gender norms and cultural practices around adolescent sexuality, often discourage or punish SAC seeking (59). Stigmatisation of abortion has several negative consequences for both adolescents and providers, including violence, stereotyping and criminal prosecution (40). In Ghana and Zambia stigmatising attitudes such as exclusion, discrimination and uninformed fear of contagion are very high (94). A recent study among university students found that self-induced abortion is common, but kept secret (95). Kumar et al. theorize that stigma forces women to deny or underreport induced-abortion. That creates the perception that abortion is not a norm, which reinforces stigma leading to a circle called the “prevalence paradox” (figure 3.4) (52).

Figure 3.4 The prevalence paradox: the social construction of deviance despite the high incidence of abortion



Source: Kumar et al. (52)

The traditional norm of not talking about sex, the feeling of embarrassment and misperception that talking about sex encourages irresponsible sexual activity are common in the UER (13). For adolescent girls living in a patriarchal society as the UER, the right to SAC and reproductive health information is often violated in favour of social norms and political gains (54,67). One study in the UER found that majority of women (71%) consider abortion a shameful act (73). Such perception could push adolescents to resort to clandestine unsafe abortions (57). Stigmatising abortions is a disincentive for both service providers and adolescents who need to engage openly, without fear of prosecution or stigma (76). For example Rominski found that some women who self-induce abortion report to health facilities as spontaneous abortion, to avoid being stigmatised (54). Inadvertently, that could lead to clinical misclassification and under-reporting of induced abortions, which in turn contribute to both the legitimacy and prevalence paradoxes (87,52). Rural women are more susceptible to the influence of traditional beliefs and community norms that inhibit abortion and may resort to unsafe abortion (6). Majority of the poor and illiterates in the UER are females, largely due to the patriarchal and patrilineal inheritance system that does not allowed females to inherit or acquire land, which is an important source of livelihood for agrarian UER (54). That contributes to adolescent girls' financial dependence on men, vulnerability to gender-based violence, inability to negotiate safe sex, risk of unintended pregnancy and inability to afford SAC (38).

ii. Social Networks

The influence of social networks such as family, peer, sexual partners and religious affiliations on adolescent health-seeking behaviour can be very strong (38,8).

Religion and Adolescent Abortions

All the three major religions in the UER (Christianity, Islam and Traditional) perceive abortion as a sin and thus stigmatise both providers and clients alike (34). The Christian Health Association of Ghana (CHAG) provide health services to 40% of Ghana's population (21). The Catholic health institutions alone provide 27% of Ghana's population health needs (74). The Catholic Church's stand against abortion discourages its facilities from providing SAC. For example, Sundaram and co found that a service provider being Catholic (compared with other religions) reduces the likelihood of providing SAC by more than half (57%) (74). On the demand side, a national survey found that 91% and 85% of unmarried adolescent females and males respectively are affiliated to at least 1 of the 3 main religions (96). The GDHS found that religious prohibition was among the reasons cited for non-use of contraceptives (17). The GHS also reports of clients declining treatment for obstetric complications due to counselling received from religious leaders (23). Paul et al. found that 90% of women in the UER consider abortion a sin (73). These facts presuppose religion may as well

be negatively influencing adolescent access to SAC in the UER. This also implies that even if abortion is made completely legal, proper sensitisation of faith-inspired institutions and training of staff on value clarification, is necessary to remove some supply side barriers to SAC (57).

Adolescent Peers

Aniteye and Mayhew found that most adolescents enlist the help of peers to conduct clandestine (97). Rominski also noted that when parents disapprove abortion, adolescents are able to terminate pregnancy with the help of their peers (54). What this could mean for adolescents in UER especially rural areas is that a successful unsafe abortion, however risky, could easily be passed on to other peers (54). Since majority of adolescents are in school, the GES intolerance of student sexuality and pregnancy, coupled with ignorance of contraception among adolescents, suggest clandestine abortions may be common (13,54,17).

Family and Sexual Partners

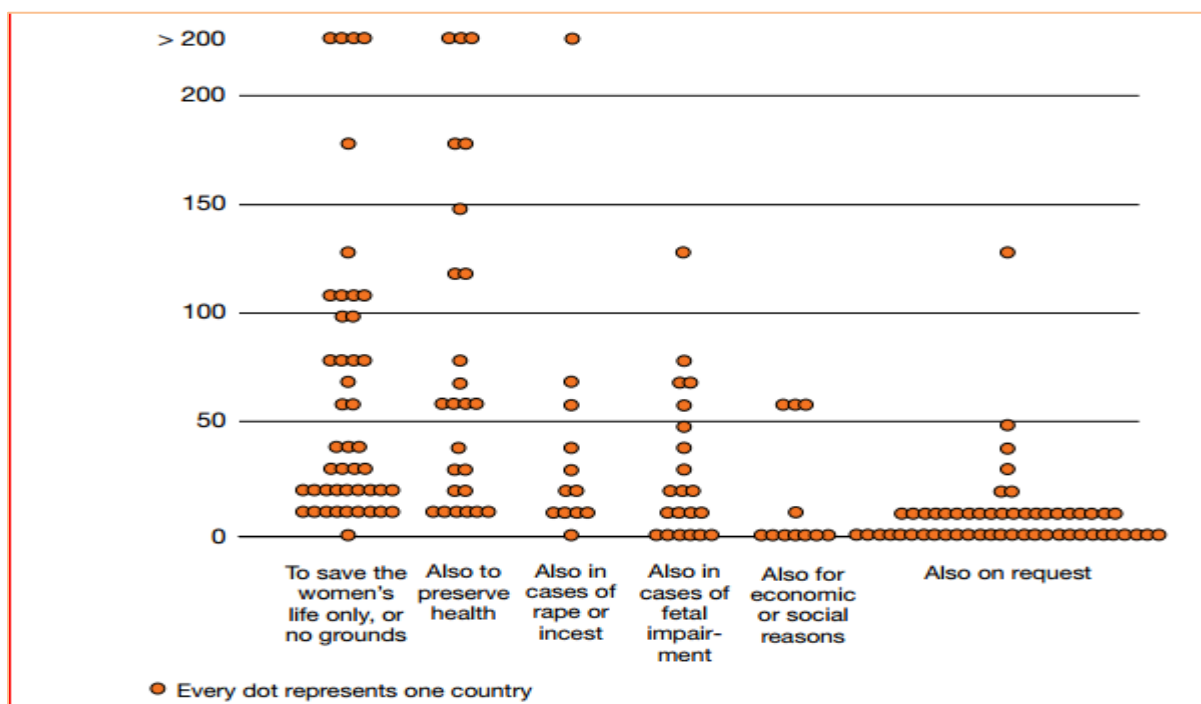
Studies suggest that family members and marriage/sexual partners influences adolescent access to SAC (38,39). The Guttmacher estimates that globally, the abortion rate among married women is 1.4 times higher than the unmarried (12). Contrary to Sundaram et al. (78) findings, several hospital-based studies (97,75,78) among women with abortion complications found that their families/partners encouraged the use unsafe abortion. The 2014 GDHS revealed that the average perceived ideal family size in Ghana increases with age; from 3.9 children among adolescents (15-19 years) to 5.3 children for women aged 45-49 years. In the UER the mean perceived ideal number of children per woman is higher than the national average (5.2 against 4.3 respectively). Considering the fact that the UER is pronatalist society, older family members who desire larger families may discourage pregnant adolescents from seeking safe abortion (98). Qualitative studies also found that most women in the UER would prefer counselling from grandmothers or mothers-in-law rather than health workers (99). Rominski and Hill et al. also documented accounts of male involvement in securing and administering abortion to adolescents (100,54). Male partners may threaten violence or abandonment if adolescent girls do not accept their abortifacients. Usually, the abortifacients are not only unsafe, but both partners may lack the necessary knowledge to administer safe medicines such as misoprostol properly (100). Kuffour et al. found that 61% of women who took misoprostol at home were assisted by their male partners, which implies partners may play similar roles in adolescent SAC seeking in the UER (90). These suggest that any intervention directed at adolescents should consider involving male partners, religious leaders and mothers-in-law (54).

3.4.4 Legal Factors

i. Abortion laws

Legal restrictions, whether *de facto* (in the wording) or *de jure* (in practice) constitute gender discrimination and definitely affects adolescent access to and utilisation of SAC (52,8). Countries with restrictive laws, have been associated with high unsafe abortions and maternal mortality (8,12). Countries that prohibit or allow abortion only to save the mother's life, have about the same induced abortion rates as countries where abortion is available on request (37 against 34 abortions per 1000 women aged 15-49 years respectively) (12). In Belgium, Germany and the Netherlands where legal abortion is available on request, the general abortion rate is below 10 abortions per 1000 women aged 15-44 per year (101). Evidence show that countries that legalise abortion on broad socioeconomic grounds and on a woman's request, together with accessible SAC have the lowest maternal deaths attributable to unsafe abortion (figure 3.5) (8).

Figure 3.5 Deaths attributable to unsafe abortion per 100,000 livebirths, by legal grounds



Source: WHO (8)

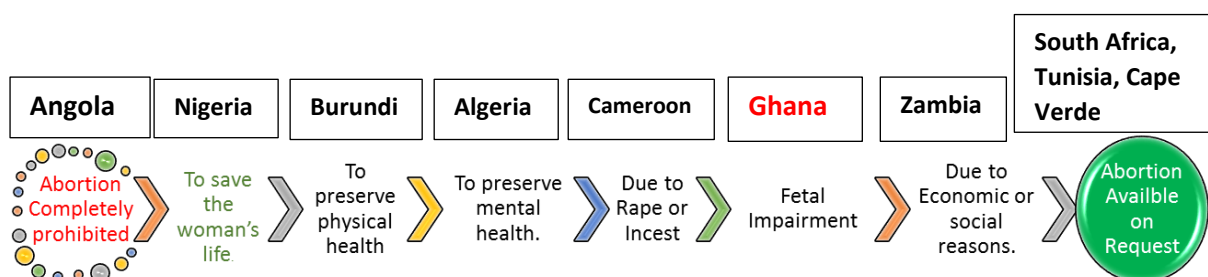
High unmet need for contraception often make adolescents restrictive countries resort to unsafe abortions (12). Sexually active unmarried adolescents often face legal barriers and community norms that exclude them from receiving contraceptives and SAC information and services (8). In countries such as Mauritius and Libya, adolescents below 19 years require parental consent to obtain SAC, which usually is a barrier (102). In Rwanda, everyone is obliged by law to report illegal abortions (103). In most of these countries, charges such as foetal/criminal murder, child

endangerment, aggravated homicide and infanticide are also used to prosecute SAC providers and adolescents (8).

ii. Ghana’s law on abortion

Ghana’s law defines abortion as “*the premature expulsion of or removal of conception from the uterus or womb before the period of gestation is completed*” (37). Prior to 1985, abortion in Ghana was regulated by Act 29, sections 58-59 and 67 of the criminal code of 1960. The code prescribed imprisonment of up to 10 years and/or a fine for both the woman and any parties involved (directly or indirectly) in any abortion attempt, even if the woman is not pregnant (104,105). On 22nd February 1985, the code was amended under PNDCL 102, which states that anyone who induces or attempts to induce an abortion (regardless of the woman’s pregnancy status) commits a punishable offence of up to 5 years in prison. It also prescribes the same punishment for anyone who supplies the material or supports the abortion to be carried out (90,50). However, the law permits abortion to preserve the physical/mental health, or to save the life of the woman. Other permitted grounds for abortion include pregnancy due to rape/incest or foetal impairment (50). It neither impose gestational limit nor require third-party authorisation (except when the woman is incapable of giving her own consent) (106). Figure 3.6 show that contrary to Norman et al. suggestion that Ghana’s abortion law is too liberal, available evidence does not support the claim (106,107,8). Ghana’s law unlike Zambia or Tunisia, is restrictive because it does not permit abortion on socio-cultural grounds or on request (107).

Figure 3.6 Ghana abortion Law in International Context



Source: (102,11,50)

Though the law is silent on third-party approval, some providers and adolescents still fear legal consequences of SAC (108,106). The GMHS suggest that the over 90% of the reasons why adolescents seek abortion may not fall directly within the legally permissible conditions (7). The WHO recommends that service providers, make available SAC to the full extent of the law (8). Notwithstanding the restrictions, Ghana’s abortion law is liberal enough for providers to perform SAC to adolescents who need them (42).

CHAPTER FOUR: EVIDENCE-INFORMED INTERVENTIONS TO IMPROVE ACCESS TO AND UTILISATION OF SAFE ABORTION SERVICES

4.1 Introduction

This chapter presents evidence-informed interventions on SAC, which could be adapted to the context of the UER, to address the barriers identified in Chapter 3. The findings show that barriers to adolescent access to SAC are multifaceted. At the individual level, poverty, low literacy and inadequate knowledge/negative perceptions and attitude constitute barriers. At the healthcare delivery system level, SAC services may be unavailable, unacceptable or inaccessible to adolescents. Poor policy implementation, high cost of SAC, poor quality and negative staff attitude may also hamper access and utilisation. Stigmatising community norms and the restrictions in the law also amplify the barriers to access and utilisation of SAC.

4.2 Interventions to Prevent/Reduce Unintended Pregnancies among Adolescents

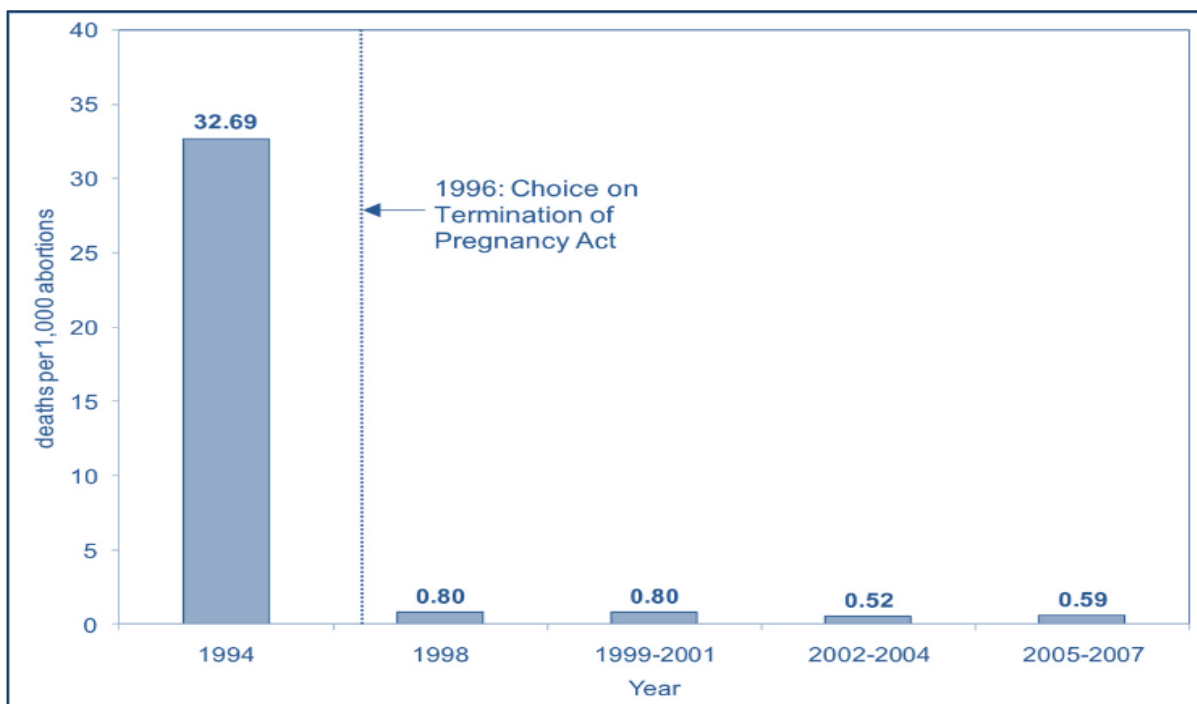
Although not the objectives of this study, the findings show that while adolescent sex is common, contraceptive use has not caught up, which often lead to unintended/unwanted pregnancies, hence the need for abortion (54,67). The WHO recommends increasing contraception/family planning uptake to prevent unwanted pregnancies and combining contraception with SAC to reduce repeat unintended pregnancies. The WHO recommendations are based on low quality randomised control trials (8) . A Cochrane review (reporting results of moderate quality) suggest that a combination of educational, skill-building and contraceptive-promotion interventions are effective in reducing the risk of unintended pregnancies among adolescents by 34% (109). In addition, contrary to the perceptions of opposition groups, the study did not find any difference in early initiation of sexual intercourse between control and intervention groups (RR 0.88, 95% CI 0.74 to 1.05). The evidence also show that either one of the interventions, on its own, do not reduce the risk of unintended adolescent pregnancies (109). That implies Ghana's policy emphasis on sex education in schools needs to incorporate contraceptive promotion. In 1998, South Africa trained health staff, improved supply, created awareness and reduced the cost of contraceptives. The CPR among sexually active women more than quadrupled in 5 years, which contributed to the reduction in abortion related mortality (110,111).

4.3 Interventions to Shift Abortion Policies and the Law

Irrespective of contraceptive accessibility, adolescent unintended and unwanted pregnancies may still occur due to contraceptive failures or unprotected coerced sex, hence the need for abortion (59). The WHO recommends broadening of abortion laws and ensuring universal access to SAC for all women (112). Empirical evidence from South Africa show that

broader abortion laws (to include socio-economic reasons) have the potential of contributing up to 91% reduction in abortion related disease burden (111). South Africa legalised abortion for pregnancies up to 12 weeks of gestation without restriction (111). Although overall MMR doubled between 1994 and 2008, evidence show that abortion case fatality rate fell from 32.69 to less than 1 (0.59) maternal deaths per 1000 abortions, in the same period (see figure 4.3). In 2008, abortion complications contributed about 3.4% to overall maternal mortality (111). The Guttmacher (citing empirical evidence from the National Committee of Confidential Enquires into Maternal Deaths) reports that 91% of the reduction in abortion-related maternal mortality was attribute to the abortion law reform (111). The impact of South Africa’s law has been considered “extremely successful” and the evidence is considered **very strong and compelling** (111). However, it is likely that the gains from the intervention were drowned by the HIV epidemic in the country (111).

Figure 4.1 Abortion-Related Maternal Deaths per 1,000 Abortions in South Africa (1994-2007)



Source: Benson, Andersen and Samandari (110).

Literature show that common interventions for abortion legislative change include advocacy, use of scientific evidence to inform policy, lobbying, partnerships, media engagement, sensitisation workshops, dialogue, community engagements and partnerships (110,111,113). For example, prior to 2014, Mozambique’s abortion law permitted abortion to save mother’s life or preserve her health. In 2011, Pathfinder International collaborated with local groups, to advocate for further liberalisation of the law. The team developed a 4-year strategic plan, organised dialogues, made learning exchange trips to more liberal countries and submitted their

proposed changes to parliament. They also lobbied lawmakers and engaged the media. In 2014, the revised code was approved and signed into law (113). Pathfinder employed a similar strategy in Burkina Faso, where the law permits abortion if 2 medical officers confirm mother's life/health is in danger; or in case of rape/incest, sufficient evidence is presented to medical officers. In 2014, Pathfinder and like-minded partners in support of abortion, identified and recruited individuals in government (called "champions") to help advocate for legislative change. Evidence from research was also aired on television to inform policy and gather public support. The proposed revisions have been submitted to the Justice Minister pending approval (113).

4.3.1 Making Abortion Laws and policies Known

Liberal abortion laws and policies make no difference if both implementers and the public are unaware of them (111). The WHO recommends that countries ensure people know their abortion laws (8). Usually, governments do not have the political will to implement or disseminate information on abortion laws and policies (113). For example, in Colombia where majority of the population are Catholic, government shelved the abortion publicity campaign following stiff resistance from opposition groups. Inadvertently, the litigations and Colombia's strong culture of newspaper reading may have made the law widely known. In South Africa, when opposition groups found a legal block to the abortion law, Ipas used Public workshops and meetings to sensitise the people; paving way for re-enactment of the law (111). In Colombia, the abortion policy guidelines were widely available and accessible despite opposition. However, South Africa and Nepal developed policies but did not disseminate them to health workers. That implies, like Ghana, the policies were likely not fully implemented (111).

4.4 Healthcare delivery system interventions

Laws and knowledge of the laws alone cannot guarantee access if the human resource and facilities are unavailable to offer quality SAC. Healthcare system's responsiveness to the abortion needs of adolescents, without cost barriers or judgemental attitudes are paramount to ensuring utilisation of SAC (8).

4.4.1 Interventions to increase availability and accessibility to quality SAC

It takes fit-for-purpose and fit-for-practice health personnel, in the right quantity and skill-mix to deliver SAC of optimum quality (8). In resource-constrained settings, like UER, the WHO recommends task-shifting from highly skilled staff to midlevel staff (such as nurses) and equitable redistribution. The WHO also recommends that provider training include value clarification exercises, to enable them deliver non-judgemental service to adolescent's (8). A Cochrane review by Banard et al. found no

increased risk of complication from MVA/MA performed by midlevel healthcare providers and medical doctors. For instance, the evidence from high quality Randomised Control Trials (RCTs) found no statistically significant increase in risk of complication for MA administered by midlevel staff compared to doctors (RR 0.81, 95% CI 0.48 to 1.36) (114). There were no complications reported although about 0.1%-0.3% is often expected for first and second trimester abortions (8,114). After redistribution interventions must be implemented to ensure continual availability of services. Some possible additional interventions to ensure staff retention in rural areas has been attached in Appendix 5 (115).

4.4.2 Interventions to make SAC affordable, sustainable and increase utilisation

Quality abortion services cost money, and the cost of SAC creates inequities in access and utilisation in favour of the rich (47). To ensure universal access and utilisation, the WHO recommends adding SAC to insurance cover (8). The Guttmacher adds that where possible, SAC should be provided free for poor women and adolescents (39). South Africa provides free SAC in government hospitals for everyone, but Nepal introduced fees (US\$1.00-US\$14.00), which became a barrier to poor women and adolescents (111). Lagarde and Palmer found that when user fees are removed, utilisation of curative services increases sharply, but when user fees are introduced, utilisation reduces unless service quality is improved (86). The study findings are based on low quality data. The implication this findings is that adolescents who can afford to pay, may continue utilise SAC services if user fees correspond with perceived improvement in quality. For poorer adolescents, removal of user fees is probably the best option, although that could negatively impact provider willingness to provide quality SAC (8,86). More quality research is needed to establish the impact on SAC uptake.

4.4.3 Using simple and low cost technology to increase access to SAC

Notwithstanding the removal of user fees, some adolescents may still not access SAC due to any of the numerous reasons. The WHO recommends using MA (a combination of Mifepristone and Misoprostol) for pregnancies up to 12 weeks; or misoprostol only for pregnancies below 8 weeks, especially at the primary care level (see Appendix 6) (8). Although misoprostol alone is effective, a combination with mifepristone is more effective in shortening the abortion completion time. The WHO reports that evidence (of moderate certainty) show that MA is safe, effective, least expensive, feasible to implement **in all settings** and acceptable by majority of users (8). In Ghana, misoprostol (Cytotec) has been approved for use and a pilot implementation of mifepristone (MEDIPRIST) is underway, pending approval (90). An independent evaluation found that 93.5% of women who had MA (both medicines) were satisfied (90). By

adopting MA and MVA together with task-shifting, South Africa doubled the number of facilities qualified to provide SAC in 3 years (110). The advantages of this option are that, it could widen the availability of SAC without increasing infrastructure or health staff cost, since existing primary care facilities and staff could provide SAC (8). It is imperative that the UER will increase adolescents' access to affordable SAC and reduce waiting time by replacing outmoded D&C procedures with MA/MVA (90,22).

4.4.4 MA as a harm-reduction intervention

The findings show that unsafe abortions do not always lead to complications or death (47,95). Evidence show that even if quality SAC is legally and widely available, there would still be some adolescents who would self-induce (8). Self-induced MA has been proposed as an alternative for SAC under restrictive laws and/or for adolescents who do not want to use facility-based SAC (54). According to the WHO, incorrect dosage of misoprostol can still result in less number of severe complications and maternal deaths (8). Ngo et al., (116) found no evidence that home-based medical abortion is less effective, safe or acceptable than clinic-based medical abortion. Complications of home-based MA requiring further interventions are also rare (0.03%-0.1% of users). The growing evidence of safe use of MA in non-sterile environments by untrained persons suggests the WHO definition of "safe abortion", which emphasises sterile environment and trained persons, is outdated (54). Self-induced abortion with the assistance of community health workers/pharmacy assistants as was the case in Tanzania, have shown promising results such as increased access to and utilisation of MA and reduction in maternal mortality (117). However, the evidence may be weak due to risk of selective reporting bias, self-reporting, and low power to detect changes (blinding). The advantage of this intervention in restrictive settings is that the signs and symptoms of buccal/orally/sublingually administered misoprostol abortion is indistinguishable from spontaneous abortion, which is less stigmatised (8). Studies show that Ghanaian women are already self-inducing abortions safely (54). Pharmacy attendants may require training be able to evaluate gestational age, prescribe and provide accurate information to adolescents, which could be expensive to do. In addition, due to poor oversight, quacks may also exploit such intervention and increase adolescent risk of complication, by using substandard medicines as in South Africa (118).

4.4.5 Telemedicine and Self-induced MA

Another promising intervention is the use of telemedicine to assist adolescents to safely self-induced abortion. A study by Grossman et al. in Iowa, USA, found that the proportion of successful MA was about the same among women who received support via telephone (99%) and face-to-face encounters (97%) (119). A qualitative study in Iowa also found that women consider telephone-assisted MA effective, safe, convenient and acceptable than conventional approach. In Sierra Leone, a pilot mobile health

(mHealth) intervention showed promising results such as improved health worker and client communication, reduced unintended pregnancies and increased health service utilisation (including facility delivery) (120). Another pilot study called mobile technology for community health (MOTTECH), has been piloted in the UER of Ghana, since 2010 pending evaluation (24). It could offer an opportunity to integrate SAC to the mobile platform. More research is needed to determine its effectiveness and long term cost-effectiveness in resource-poor settings as the UER (120).

4.5 Interventions increase utilisation of SAC

From the findings in Chapter 3, it is clear that the ensuring adolescent access to and utilisation of SAC in the UER is beyond the healthcare delivery system alone (8,40,113). Coalitions present a stronger voice for advocacy and prevent the isolation of individuals/organisations for stigma (113). The effect of diverse community level interventions on SAC are yet emerging, but reports on some interventions show promising results (40). One such interventions is Women's Groups Practising Participatory Learning and Action (WGPPLA), which was originally designed to improve uptake of skilled delivery and prevent new-born infections at home (121). It involves a cycle of 4 phases – identification and prioritisation of pregnancy related problems; Planning; implementation of locally feasible options/solutions; and assessing the outcome. To do this, local women groups are facilitated by trained females (non-health workers) in regular monthly/fortnightly meetings. A systematic review of 7 high quality cluster RCTs, comparing WGPPLA and control groups, found that WGPPLA was associated with 37% reduction in maternal mortality (OR 0.63, 95% CI 0.32–0.94) (121). The authors attributed the reduction in MMR to increased utilisation of skilled delivery among WGPPLA groups (121). Such an intervention can be adapted to improve knowledge, reduce stigma, and change the attitude and perceptions of adolescents and mothers-in-laws towards SAC. However, involving women alone is insufficient to shift community/gender norms that perpetuate abortion stigma (40).

4.6 Interventions to Shift community/Gender norms and reduce stigma

Since gender roles and community norms of the UER place men, mothers-in-laws, parents as primary gatekeepers of adolescents, it is crucial to involve them and other social networks in SAC interventions (72). Sakar et al., found that social mobilisation (reported by 1 study) leads to increased knowledge, use of SAC and reduced unsafe abortions (72). In South Sudan, the SHARP program used dialogues between younger and older males and females, to improve reproductive health services utilisation and shift social and gender norms and values (122). The strategy involves using non-literate-friendly interactive methods such as drawing, statements and proverbs to identify and discuss stereotyped gender relations. The intervention proved to be promising as communities agreed to stop child

marriage, accept family planning and men increasingly promoted the use of family planning (122). Additionally, a systematic review by Aguiar and Jennings (123) concluded that interventions that involved men increased maternal knowledge of pregnancy and utilisation of skilled delivery and postnatal services. In Malawi for example, Kalembo and co found that HIV-positive women who attended antenatal clinic (ANC) with their male partners were 25.9 times more likely to deliver in a hospital compared to HIV-positive women who attended ANC alone (124). It is, thus, plausible that community-involvement in adolescent abortion interventions may reduce stigma and improve SAC uptake (123).

CHAPTER FIVE: DISCUSSIONS

5.1 Introduction

This chapter contains the discussions of the feasibility or opportunities to implement the reviewed interventions in the UER and the usefulness of the framework in achieving the study objectives. The findings suggest that there are successful interventions to increase contraceptive use and improve access to and utilisation of SAC among adolescents. Adolescents are more likely to utilise SAC if they have knowledge of the abortion law, the availability and location of SAC facilities and the disadvantages of unsafe abortion. Interventions such as value clarification training of staff, inclusion of SAC in the NHIS coverage, further liberalisation of the law and shifting from D&C abortion methods to MA could improve adolescents' access to and utilisation of safe abortion services. Interventions that engage communities and adolescent social networks is also essential in reducing abortion stigma.

5.2 Preventing Adolescent Unintended Pregnancies

Firstly, in the context of the UER, the combined contraceptive education and promotion interventions, as reviewed in chapter 4 could be implemented in public health facilities. To reach adolescents in schools and communities, the UER health directorate may review successful interventions such as community dialogues and other educational strategies to increase adolescents' knowledge, access and use of contraceptives. This discussion will further concentrate on improving availability, access to and utilisation of SAC for adolescents as this is the main focus of this thesis.

5.3 Shifting laws and Policies and making them known

The evidence in chapter 4 show that interventions that result in legislative or policy change include advocacy, coalition building, lobbying lawmakers, recruiting "champions", use of evidence to gather support and inform policy, engaging media and organising dialogues. Considering the current level of stigma, there may be no political will to implement abortion legislative reform in Ghana. Nevertheless, committed officers in the MOH/GHS and other stakeholders such as the MSIG, can draw a long term strategy (say 5 years or more), lobby politicians and encourage dialogue on SAC, as pathfinder did in Burkina Faso and Mozambique. In the meantime, additional research into the impact of the law on SAC can be carried out, and the results used for advocacy as in Burkina Faso. This also imply data collection is important for evidence informed decisions. It is also feasible to begin scoping for champions and engaging the media. As a rule of the thumb, the proposed legislation can be drafted in advance so that improvements can be made prior to presentation to parliament. To increase

the likelihood of parliamentary approval, the proposed legislative must be presented in a non-election year, because government/parliamentarians' stakes in backlash will be low. That notwithstanding, activist should expect resistance from opposition groups, which is a normal part of the change process.

Furthermore, it is crucial to educate adolescents on the abortion law and how to access SAC, how to use MA for self-induced abortion and the risks of unsafe abortion. Ideally, since 95% of adolescents are in school, these interventions should be integrated into the basic school curriculum to ensure students have access SAC information. But, given the problems in making contraceptive information and services taught in schools, this option may not be the most feasible one in the short term. Capacity building of teachers on SAC and value clarification for effective implementation of SAC may be feasible in the long run. Workshops and community meetings (durbars as they are called in Ghana) are effective means of getting information to both adolescents and their networks. MOTECH mobile platform is a potential intervention to increase adolescent access to SAC information. Lessons from the Sierra Leone intervention can also be added to improve its acceptability and reduce possible domestic conflicts.

In addition, since the abortion policy guideline is not widely available or understood by service providers, the GHS/MoH can upload the SAC guidelines and the abortion law on their websites for easier access. In Columbia for instance the policy was widely available despite the public resistance. Periodic evaluation and training (including value clarification), and supervision would help improve health workers knowledge and compliance with the policies.

5.4 Ensuring availability and accessible and acceptable quality SAC

The findings (in chapter 3) also reveal that SAC facilities in the UER are arguably inadequate and the distribution is skewed in favour of the urban areas. Task shifting is already documented in Ghana's abortion standards and guidelines, but the challenge is implementation. Overall, the UER is better staffed with nurses and midwives compared to other regions. Redistribution and retention of midwives and nurses in the rural areas is perhaps more practical and cost effective way of increasing SAC availability. But, increasing availability of SAC alone may not translate to access as the quality of legal SAC seem to be compromised by unprofessional and stigmatising attitudes of some service providers towards abortion. This calls for value clarification exercises, preferably in periodic intervals such as every 2 years, to enable service providers to deliver non-judgemental SAC. It is also advantageous to involve the private sector and other like-minded stakeholders in SAC. With MSIG already experienced and leading in SAC provision, the Regional Health Directorate could liaise with them to extend their services to the UER. Government's commitment play key role in both policy change and ensuring implementation remains essential.

5.5 Making SAC affordable and sustainable for adolescents

In addition, because abortion legal abortion is in the UER entail is paid out of pocket, the associated costs could render access completely impossible for some adolescents. Cheaper that means they could be lured by cheaper offers from quacks, to carry out unsafe abortion. The evidence suggest that removal of the user fees could increase adolescents' utilisation SAC. Alternatively improvement of quality can still retain utilisation temporarily. **The most feasible intervention for achieving sustainable affordable SAC is to add it to the Ghana NHIS**, which is an existing solidarity arrangement for risk protection. It could be argued that adding SAC to the benefit package saves the NHIS from paying for more expensive treatment for unsafe abortions. The free maternal and child health policy for instance presents an opportunity to integrate menstrual regulation into the package. Moreover, government's intention to upscale capitation also present an opportunity to advocate for the addition of SAC into the package. Alternatively, SAC could be offered free to adolescents, while preventing informal fees from being charged. Opponents may have uninformed fears that providing free SAC could lead to moral hazard but this study found no evidence supporting that

Another intervention for making SAC widely available, accessible and affordable is the adoption of the WHO recommended low cost yet effective technologies – MVA/MA. The **adoption of MA/MVA** is particularly desirable because beside sound scientific evidence, the experience of South Africa and studies in Ghana show that **MA is not only feasible in the UER but safe with high user acceptability**. It is probably **the easiest and cost effective SAC intervention** that the UER can adopt. But its adoption should not replace the use of insurance cover for SAC because some of the poor adolescents may not afford. Paradoxically, although misoprostol is reported to be widely available in pharmacies, the findings suggest adolescents may be utilising it as an abortifacient rather than the service providers. This raises the question of whether the GHS should consider self-induced MA as a harm reduction strategy as in Tanzania. The findings in chapter 3 show that with adequate counselling, adolescents who do not have access or do not want to use facility-based abortion, may be able to self-induce safely. The GDHS and other studies found that a large proportion of women already use misoprostol to self-induce abortion safely. It is always expected that about 0.1%-0.3% of users would require some form of intervention following MA/MVA. This means that the referral system will have to be prepared for any emergencies that require specialist attention.

5.6 How to Increase SAC utilisation

The evidence in the previous chapter show that any intervention targeting adolescents abortion must take into account the adolescents social network and the community and gender norms and values that stigmatise abortion and serve as barriers to SAC. Adapting the WGPPLA will be cost effective

and easy to implement in the UER because adolescents are easy to get together in their respective communities or schools. The facilitators must however be a trained adolescent females to ensure that age does not become a barrier to free discussion. This can be done in community basis or based on existing groups. It is also laudable that adolescent boys be part of the program to enable them acquire the same self-efficacy as their female counterparts. It could also help shift their perception of abortion thereby reducing stigma.

5.7 Shifting norms and reducing stigma in the UER

In addition, **community dialogue** is another feasible and probably the most acceptable intervention to shifting community norms and gender relations that hinder access to SAC. Since 47% of the UER population, especially rural women are non-literate, the use of proverbs, speeches and drawing as in Sudan, will be appealing and appropriate in dialogues. The open discussion on abortion stigma and gender stereotypes and norms will also break the silence around adolescent sexuality and abortion. To be successful, the dialogues should begin with participants grouped according to age groups and sex (younger and older males and females), which will create the environment for free expression of opinions. The groups can then come together for the grand dialogue after they have each achieved consensus. The intervention can also be done in schools too.

Male involvement will be feasible only during community dialogues but not during pre-abortion counselling, because the men/boys responsible for the pregnancies often want to avoid the authorities and stigma, even for married adolescents. It is also unlikely that married males would participate in any abortion discussion and the GDHS noted that no male wants to prevent the birth of the first child in Ghana. The desire to keep the pregnancy secret makes couple discussions unlikely. However, on individual basis, couples can be counselled together to enable them make informed choice to use SAC.

5.8 Usefulness of the framework to the study

The adapted framework has enabled the study to identify and explore present the findings in accordance with the study objectives. It also helped in the analysis as it presented the interaction between factors. Its flexibility allowed the study to explore the factors beyond demand and supply side, to include community norms, social networks, policy and legal. There were difficulties in distinguishing between community norms and social networks as they overlap. The arguments are whether social networks are not part of the community norms. The main challenge however, was the dearth of literature on induced abortion among adolescents in the UER.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusions

This study grew out of a desire to find answers to the reasons behind the persistence of adolescent unsafe abortion in the UER despite the availability of legal SAC. The study found that adolescents decision to abort a pregnancy, like any other healthcare decision, are not taken in isolation. Deciding to use SAC or not, may be influenced by their knowledge of available services and their ability to purchase them. In addition, the stronger influencers are the societal and community norms that stigmatise adolescent sexuality and sexual behaviour; the power that adolescent girls have and exercise over their bodies/lives; and most importantly the formal healthcare delivery system and the laws and policies governing abortion service provision. The exclusion of SAC from NHIS package and staff reluctance to provide SAC might be forcing adolescents to use unsafe abortion to induce bleeding, in order to access insurance paid post-abortion care and avoid stigma. Since treating abortion complication is more expensive than carrying out a safe abortion, it would be prudent to add SAC to the package or make it free service. Value clarification training, task-shifting, redistribution of staff and adoption of MA/MVA, and possible use of mHealth mobile platforms, are all necessary to ensure access to SAC. In addition, the current abortion law does not meet the needs of adolescent girls. A more liberal or completely legal law together with proper implementation would make SAC more available and accessible to adolescents. The social context in which abortion is stigmatised meant that political will to remove the legal restrictions is lacking. Dialogues, debates, and advocacy programmes involving diverse stakeholders may help open up peoples understanding and change stigmatising norms. In a nutshell, the findings point to the fact that no single intervention is a panacea for the barriers to access and utilisation of SAC. A more liberal law should be accompanied by both healthcare improvement, and mechanisms that address the long standing community norms that stigmatise adolescent sexual activity and abortion.

6.2 Recommendations

Based on the findings of this study, the following recommendations are made to stakeholders as follows.

1. To The GHS

- ❖ Collaborate with the GES and pharmacies, and train teachers and pharmacy attendants to educate and promote contraceptive use, and to provide accurate information on MA to adolescents. This will reduce unintended adolescent pregnancies, and reduce unsafe abortion complications.

- ❖ **Shift tasks for MA and MVA to midwives and nurses; redistribute them to rural areas**, and motivate them to stay.
- ❖ **Implement the use of MA in all facilities** with trained staff by integrating it into the reproductive health services and monitor to ensure SAC is provided to the full extent of the law.
- ❖ Make staff training needs assessment and **conduct value clarification training** to enable staff provide non-judgemental SAC to adolescents.
- ❖ Use community dialogues to engage mothers-in-laws, parents, religious and community leaders, sexual partners, men and other adolescent social networks to identify and discuss stereotyped gender relations, community norms and values that stigmatise adolescent sexuality and abortion.

2. To the MSIG and GHS

- ❖ Collaborate to extend MSIG's quality SAC services to the adolescents in the UER.
- ❖ **Train frontline health workers** to provide accurate SAC information to adolescent social networks and to make referrals to service providers.
- ❖ Collaborate with stakeholders to evaluate the MOTECH project and the possibility of integrating SAC information to the mobile platform for adolescents.

3. To the MoH, GHS, MSIG and others

- ❖ Use community dialogue to engage stakeholders including community and religious leaders, policy makers, providers, adolescents and older men and women to discuss abortion in Ghana, to reduce stigma and gather support for policy change.
- ❖ Create a medium-long term strategy (5 years or more) to advocate for further liberalisation of Ghana abortion law to conform to international standards and to meet the needs of adolescents.
- ❖ Conduct additional research into the effect of the current abortion law and policies on adolescent access to SAC in the Ghana and use the evidence to advocate for legislative change and inform subsequent legal amendments.
- ❖ Introduce MA as a harm reduction strategy in the UER.

4. To the MOH, GHS, NHIA

- ❖ **Add SAC to the NHIS package and making it free for adolescents** and monitor to prevent under-the-table charges to improve equity in access and utilisation of SAC.

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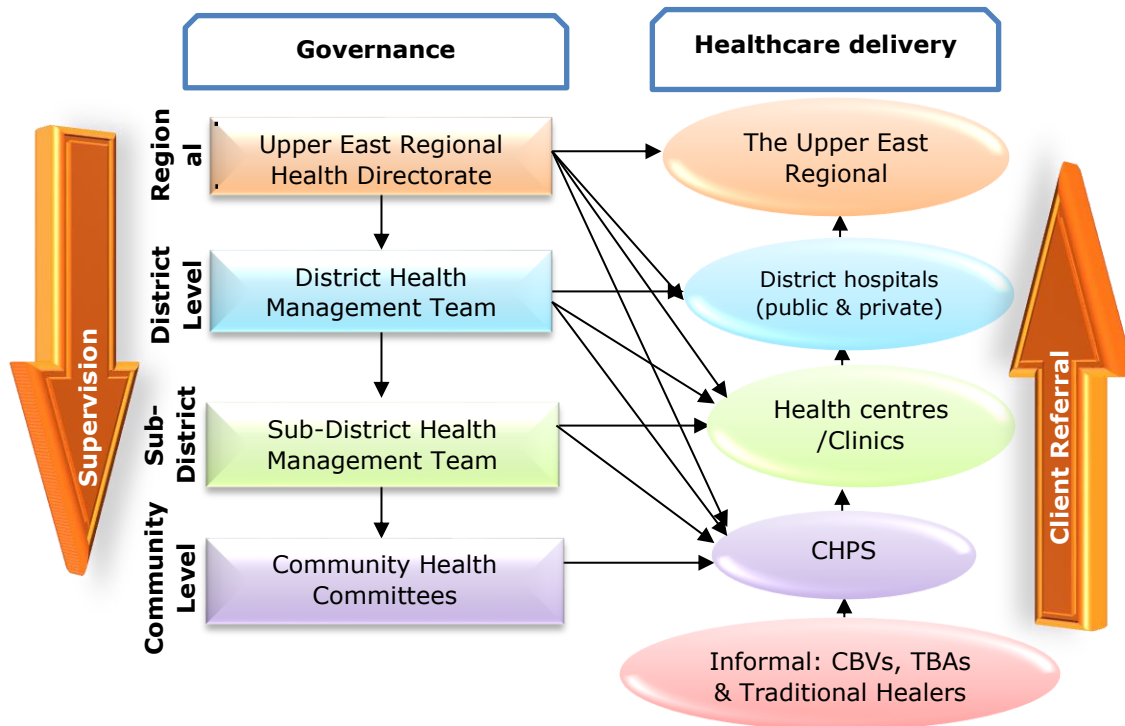
APPENDICES

Appendix 1: Map of Ghana showing the UER in (Not to scale)



Source: GDHS (17)

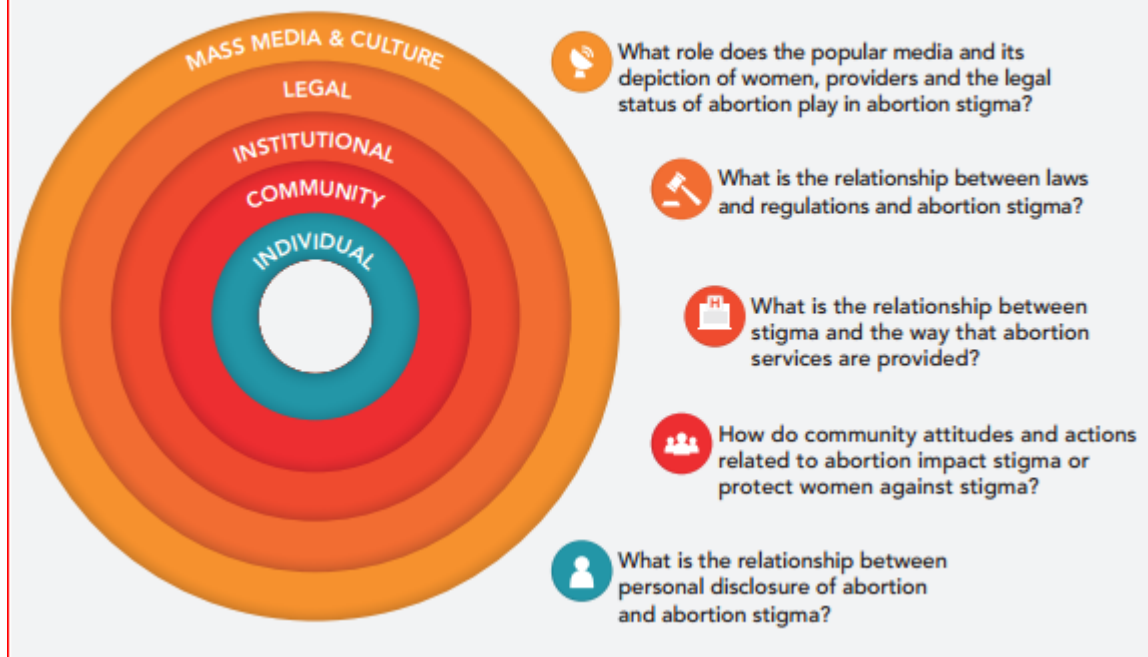
Appendix 2: Healthcare delivery and Governance structure in the UER



Source: adapted from (24)

Appendix 3: Le Tourneau's Ecological Model of Abortion Stigma

Figure 1: Ecological Model of Abortion Stigma



Source: (42)

Appendix 4: The Signal Functions Used to Identify Basic and Comprehensive Emergency Obstetric Care Services.

Basic services	Comprehensive services
(1) Administer parenteral ¹ antibiotics	Perform signal functions 1–7, plus:
(2) Administer uterotonic drugs ² (i.e. parenteral oxytocin)	(8) Perform surgery (e.g. caesarean section)
(3) Administer parenteral anticonvulsants for pre-eclampsia and eclampsia (i.e. magnesium sulfate).	(9) Perform blood transfusion
(4) Manually remove the placenta	
(5) Remove retained products (e.g. manual vacuum extraction, dilation and curettage)	
(6) Perform assisted vaginal delivery (e.g. vacuum extraction, forceps delivery)	
(7) Perform basic neonatal resuscitation (e.g. with bag and mask)	
<p>A basic emergency obstetric care facility is one in which all functions 1–7 are performed. A comprehensive emergency obstetric care facility is one in which all functions 1–9 are performed.</p>	

Source: WHO (85).

Appendix 5: Staff retention strategies

Type of Intervention	Country	Components	Professional Cadre
Bundled (mixed interventions)	United Republic of Tanzania	Assess availability and effectiveness of non-financial incentives: training, leave, participatory appraisal system, worker participation in discussion job requirements and welfare, promotion, supervision, recognition and respect, housing, safe and supportive environment.	
	Zambia	Financial incentive (hardship allowance), school fees, loans facility for cars or a house and assistance with postgraduate training at the end of the 3-year contract. Funds for renovation of Government housing are included	
	Kenya	Comparison of different retention strategies; no specific intervention as such	
	Mali	Training, support from professional association and installations kits	Physicians
Financial incentives	South Africa	Rural allowance	Various health workers (nurses, physicians)
	Niger	Incentives for motivation, placement and task and for risk related to the job, for accommodation telephone, being on call, and transport	Physicians, pharmacists and dentists
	Uganda	Lunch allowance	All cadres
Compulsory Service	South Africa	1 year in rural areas	Physicians

Source: Dieleman et. al (116)

Appendix 6: The WHO Recommended Methods for Medical Abortions

The recommended method for medical abortion is mifepristone followed by misoprostol.

For pregnancies of gestational age up to 9 weeks (63 days)

The recommended method for medical abortion is mifepristone followed 1 to 2 days later by misoprostol. [See notes below for dosages, and routes of administration.]

(Strength of recommendation: strong.)

Quality of evidence based on randomized controlled trials: moderate.)

Dosages and routes of administration for mifepristone followed by misoprostol

Mifepristone should always be administered orally. The recommended dose is 200 mg.

Administration of **misoprostol** is recommended 1 to 2 days (24 to 48 hours) following ingestion of mifepristone.

- For vaginal, buccal or sublingual routes, the recommended dose of misoprostol is 800 µg.
- For oral administration, the recommended dose of misoprostol is 400 µg.
- With gestations up to **7 weeks** (49 days) misoprostol may be administered by vaginal, buccal, sublingual or oral routes. After 7 weeks of gestation, oral administration of misoprostol should *not* be used.
- With gestations up to **9 weeks** (63 days) misoprostol can be administered by vaginal, buccal or sublingual routes.

See also: Annex 5, Recommendation 2, page 113.

For pregnancies of gestational age between 9 and 12 weeks (63–84 days)

The recommended method for medical abortion is 200 mg mifepristone administered orally followed 36 to 48 hours later by 800 µg misoprostol administered vaginally. Subsequent misoprostol doses should be 400 µg, administered either vaginally or sublingually, every 3 hours up to four further doses, until expulsion of the products of conception.

(Strength of recommendation: weak.)

Quality of evidence based on one randomized controlled trial and one observational study: low.)

See also: Annex 5, Recommendation 3, page 114.

For pregnancies of gestational age over 12 weeks (84 days)

The recommended method for medical abortion is 200 mg mifepristone administered orally followed 36 to 48 hours later by repeated doses of misoprostol.

[See notes below for dosages, and routes of administration of misoprostol.]

(Strength of recommendation: strong.)

Quality of evidence based on randomized controlled trials: low to moderate.)

- With gestations between 12 and 24 weeks, the initial misoprostol dose following oral mifepristone administration may be either 800 µg administered vaginally or 400 µg administered orally. Subsequent misoprostol doses should be 400 µg, administered either vaginally or sublingually, every 3 hours up to four further doses.
- For pregnancies beyond 24 weeks, the dose of misoprostol should be reduced, due to the greater sensitivity of the uterus to prostaglandins, but the lack of clinical studies precludes specific dosing recommendations.

Source: (8)